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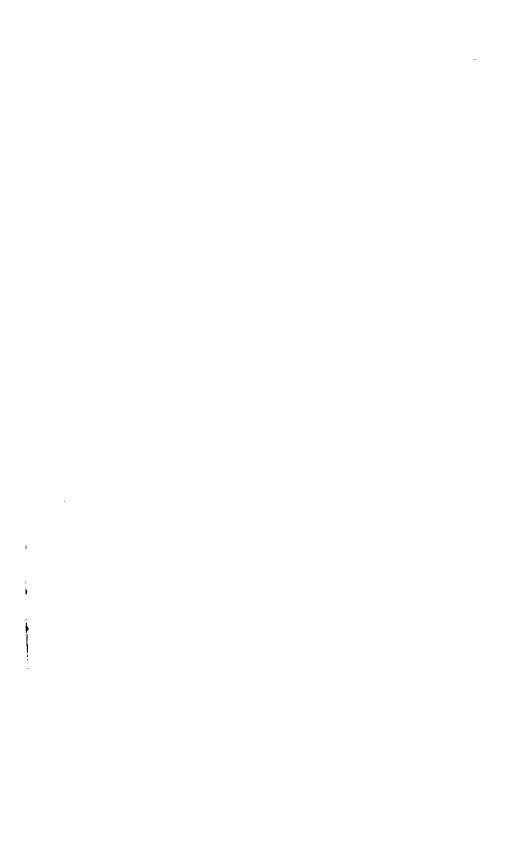






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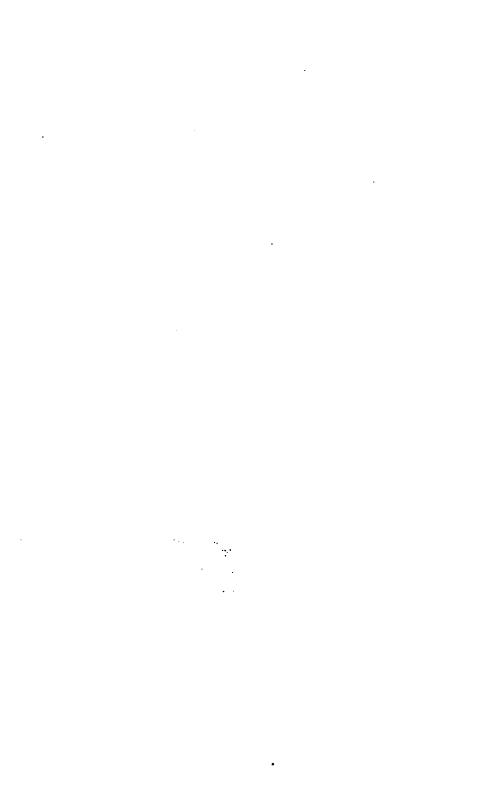
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PATENTEE'S MANUAL

BEING

A TREATISE

ON THE

LAW AND PRACTICE OF LETTERS PATENT

ESPECIALLY INTENDED FOR THE USE OF

PATENTEES AND INVENTORS

BY

JAMES JOHNSON

OF THE MIDDLE TEMPLE, BARRISTER-AT-LAW

AND

J. HENRY JOHNSON, Assoc. Inst. C.E.

SOLICITOR AND PATENT AGENT, LINCOLN'S-INN FIELDS,
AND GLASGOW

Fourth Edition, thoroughly Rebised and much Enlarged.

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A CONCISE VIEW OF THE LAW CONNECTED WITH LETTERS PATENT FOR INVENTIONS.

A Handy Book of Patent Law.

LONDON: LONGMANS & Co.

PREFACE TO THE FOURTH EDITION.

In preparing the Fourth Edition of this work for the press, the whole has been subjected to very careful re-Several of the chapters have been much extended; a new chapter—that on Oppositions to the Grant of Patents—has been added; the latest decisions of the Courts, some of them of great importance, have been incorporated; and no pains have been spared to render the treatise one which patentees and inventors may consult with confidence as a trustworthy exposition of that branch of law with which their interests are most closely concerned. Although the treatise was originally written especially for their use, the authors venture to think that in its enlarged form it will deserve the notice of the legal profession, since the large experience of one of them in obtaining patents, and in the conduct of litigation arising out of patents for nearly thirty years, has been turned to account in the production of the volume, which it is believed will be found to contain in a concise form the whole law and practice connected with Letters Patent.

The most important addition to the Abstracts of Foreign Patent Laws is that of the law which has come into force throughout the Empire of Germany, by virtue of which a single patent may now be readily obtained where numerous patents were formerly required, and those difficult to be procured. The new Spanish Patent Law has also been given. All the articles

under this head have been revised by foreign correspondents. Besides the Patent Laws of Foreign Countries there will be found in the Appendix some account of those of our own Colonies, and a reprint of all the Acts of Parliament bearing upon the subject of this work, with references to the cases decided thereon. The reader who is in search of any particular subject will find the copious Index of material assistance.

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EXPLANATION OF ABBREVIATIONS.

Ad. & El	Adolphus & Ellis' Reports
B. & A	Barnewall and Adolphus' Reports
B. & Ald	Barnewall & Alderson's Reports
B. & C	Barnewall & Cresswell's Reports
Bea	Beavan's Reports
B. & S., or Best & Sm	Best & Smith's Reports
Bing. N. C	Bingham's New Cases
Bos. & Pul	Bosanquet & Puller's Reports
C. B	Common Bench Reports
C. B. n. s	Common Bench Reports, New Series
C. & K	Carrington & Kirwan's Reports
C. & P	Carrington & Payne's Reports
C. L	Common Law Reports
Carp. Rep	Carpmael's Reports of Patent Cases
Coop. C. C	Cooper's Chancery Cases
Cr. M. & R	Crompton, Meeson, & Roscoe's Reports
Day. P. C	Davis' Patent Cases
Dav. P. C	De Gex, Fisher & Jones' Reports
De G. & J	De Gex & Jones' Reports
De G. M. & G., or De G.	•
Mac. & Gord	De Gex Macnaghten & Gordon's Reports
De G. J. & S	De Gex, Jones & Smith's Reports
Dr. & Sm	Drewry & Smale's Reports
E. & B., or El. & Bl	Ellis & Blackburn's Reports
Ell. Bl. & Ell	Ellis, Blackburn & Ellis' Reports
Ell. & Ell	Ellis & Ellis' Reports
Eq. Rep	Equity Reports
Exch. Rep	Exchequer Reports
Giff	Giffard's Reports
	H. Blackstone's Reports
H. & M	Hemming & Miller's Reports
H. L. C	House of Lords Cases
Holroyd	Holroyd on Patents
Hurlst. & Norm. Ex. Rep., >	Huristone & Norman's Exchequer Reports
or H. & N	nuristone & Norman's Exchequer Reports
Johns	Johnson's Reports
Jur. n. s	Jurist, New Series
K. & J	Kay & Johnson's Reports
K. & J	Law Journal Reports, New Series, Chancery
L. J. n. s. Q. B	Ditto, ditto, Queen's Bench
L. J. n. s. C. P	Ditto, ditto, Common Pleas
L. J. n. s. Ex	Ditto, ditto, Exchequer

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L.T	Law Times Repo	orts
L. T. n. s	$\mathbf{D_0}$.	New Series
Macr. P. C	Macrory's Patent	Cases
Macr. P. C	Macnaghten & G	
M. & G	Manning & Grai	
M. & W	Mecson & Welsb	
Mer	Merivale's Repor	
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Myl. & Cr	Mylne & Craig's	Reports
N. R	The New Report	s
	Newton's London	
Pract. Mech. Jour	Practical Mechan	nic's Journal
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~ ~ ~ ~	Scott's Common	
Stark, R.	Starkie's Reports	
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THE LAW

OF

PATENTS FOR INVENTIONS.

CHAPTER I.

PRELIMINARY.

That the Crown has the power, in certain cases, of granting to inventors the privilege of a monopoly in working their inventions for a certain number of years, is probably known to every reader before he opens this volume. During that period the entire community is precluded from making use of the invention, except by the permission of the inventor, or the person representing him; the law declaring that the privileged person shall derive the exclusive benefit, whatever that may be, of the invention for the specified time.

This privilege is secured to the inventor by letters patent passed under the Great Seal, and the person to whom the privilege is granted is termed in common parlance the patentee.

For the purposes of the present treatise, there is no need that we should enter upon any historical disquisition as to the common-law right of the Crown in matters of patent privileges. It will be sufficient to state that the right of the Crown to grant privileges by letters patent to subjects obtaining its favour, was

¹ The seal now actually used is a Wafer Great Seal, under the Act 40 and 41 Vict. c. 41.

exercised in very early times, and it was only disputed when exclusive rights to sell various commodities, such as salt, iron, and coal, had been granted to certain persons, to the great grievance of their fellow-subjects, and to the oppression of trade. The Statute of Monopolies, passed in the twenty-first year of James I., was levelled at the abuses which an undue exercise of prerogative had produced, and being, says Sir Edward Coke, forcibly and vehemently penned for their suppression, cut off all claim on the part of the Crown to the right of granting monopolies and exclusive privileges, whereby the subjects of the realm could be aggrieved and inconvenienced.¹

That statute (see the Appendix) declared that all monopolies, grants, and letters patent, for the sole buying, selling, making, working, or using of anything within the realm, were contrary to the laws, and void. But it excepted from the operation of this enactment

1 "The King had undoubtedly, by the ancient laws of the realm, large powers for the regulation of trade: but the ablest judges would have found it difficult to say what was the precise extent of those powers. . . . In addition to his undoubted right to grant special commercial privileges to particular places, he long claimed a right to grant special commercial privileges to particular societies and to particular individuals; and our ancestors, as usual, did not think it worth their while to dispute this claim till it produced serious inconvenience. At length, in the reign of Queen Elizabeth, the power of creating monopolies began to be grossly abused; and as soon as it began to be grossly abused; and as soon as it began to be grossly abused, it began to be questioned. The Queen wisely declined a conflict with a House of Commons backed by the whole nation. She frankly acknowledged that there was reason for complaint: she cancelled the patents which had excited the public clamours; and her people, delighted by this concession and by the gracious manner in which it had been made, did not require from her an express renunciation of the disputed prerogative. The discontents which her wisdom had appeased were revived by the dishonest and pusillanimous policy of her successor, called King-craft. He readily granted oppressive patents of monopoly. When he needed the help of his Parliament, he as readily annulled them; and as soon as the Parliament had ceased to sit, his Great Seal was put to instruments more odious than those he had recently cancelled. At length that excellent House of Commons which met in 1623, determined to apply a strong remedy to the evil. The King was forced to give his assent to a law which declared monopolies established by royal authority to be null and void." (Macaulay's "History of England," iv. 127.)

all letters patent and grants of privilege of the sole working or making of any manner of new manufactures to the true and first inventor of such manufacture, which others at the time of making such letters patent and grants should not use, so they be not contrary to law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient. It was afterwards declared that these excepted grants of privilege should have the same validity that they had previous to the passing of the statute, but no other. Hence, when the validity of a monopoly comes into question, the first point to consider is, whether it is rendered void by the statute; and secondly, if it should not be thereby avoided, whether it is a privilege permitted by the common law.

In this treatise, however, we restrict ourselves to a consideration of Letters Patent for inventions. It is not every kind of discovery that can be protected by letters patent. For example, no valid patent could be obtained for a new game of skill or chance; or for a new method of calculation; or for a newly-discovered grain suitable for food; or for a newly-discovered natural substance suitable for manure, such as guano, or mineral phosphate of lime. These would not be inventions within the meaning of the statute of James I. and the decisions of our courts of law, which require a patentable invention to be referable to some manner of manufacture, in addition to the possession of the qualities of utility and novelty.

Nor is it every one who may succeed in obtaining from the Crown a grant of letters patent for an invention that is able to sustain it in a court of law. Letters patent are only valid in the hands of the first and true inventor (the language of the statute of James), or in the hands of those who have duly succeeded to his rights.

Again, a patent privilege cannot be granted in perpetuum; it must not endure for more than a limited number of years.

We shall take these things in order, and shall proceed to inquire in the following chapters—

- 1. What is the subject-matter or nature of a patentable invention, and what are the incidents that must by law accompany it.
 - 2. To whom patent privileges may legally be granted.
- 3. What is the possible duration of such privileges, and the territory over which they may extend.

These matters being disposed of, there will still remain for consideration the very important topic of a Specification—the document which the law requires every patentee to draw up and make public before or soon after he obtains his letters patent. Chapters on some collateral subjects, such as Oppositions to the grant of letters patent, Disclaimers, the Assignments of letters patent, their Prolongation, and the Infringement of patent rights, will then close this treatise.

In the Appendix will be found a reprint of all the Acts of Parliament relating to Letters Patent, with the Rules, Regulations, and Forms, and an outline of the Patent Laws of Foreign Countries and British Colonies.

CHAPTER II.

THE SUBJECT-MATTER OR NATURE OF A PATENTABLE INVEN-TION.—NO PATENT FOR A BARE PRINCIPLE.—PROCESSES. —CLASSES OF INVENTIONS.—AMOUNT OF INVENTION.— SECOND PATENTS.

In proceeding to consider the subject-matter or nature of the inventions which may legally be made the subject of patent privileges, it is proper to premise that no general definition can be given which shall exactly mark out what can and what cannot be included in a valid patent. Where the invention is not one of a well-known class, it will be much better for the inventor to consult some one conversant with such matters,—some one whose practical experience comes in aid of general principles, and who is bound by his profession and standing in society to the utmost secrecy, —than to rely altogether upon what is stated in books, or upon a narrow range of precedent. It is the more important that the inventor's attention should be drawn to this point previous to his incurring expense, since a patent is taken out entirely at the risk of the inventor, the Crown in no degree guaranteeing the validity of its grant, which, if contested, must be judged by the abstract rules of law applicable to the case.

We believe it will be found, on examination of the cases, that the inventions which have received the sanction of judicial decision may be classed under one or other of the following heads:—

1. Vendible articles, the result of chemical or mechanical processes, such as medicines, felt, waterproof cloth, etc.

- 2. Machines, or improvements in machines.
- 3. Processes, in some cases requiring, in others not requiring, special machinery.

We need not at present enter into further detail as to the inventions which fall under the first two heads; but with regard to those comprehended under the third head, we shall make some remarks, after disposing of the cases relating to scientific principles, or the laws of nature.

It has been repeatedly laid down by the Courts that

BARE PRINCIPLES ARE NOT PATENTABLE.

A principle may be of the utmost value in the eyes of philosophers; its discovery may lead to highly important consequences, and form the germ of a striking advance in civilization; yet unless its discoverer can show at least one application of it to a useful purpose,—unless he can point out the means of gaining therefrom some immediate material advantage, he is not permitted to exclude his fellow-subjects from turning it to any account they like. "I rather think it would be difficult" (said Lord Kenyon, in Hornblower v. Boulton, 8 T. R. 95; Dav. Pat. Ca. 221) "to form a specification of a philosophical principle; it would be something like an idea without a substratum."

Neither are principles in a more restricted sense patentable, unless they are embodied in a concrete form by showing their application to one or more useful purposes. "You cannot" (said Alderson, B., in Jupe v. Pratt, 1 W. P. C. 145) "take out a patent for a principle. You may take out a patent for a principle coupled with the mode of carrying the principle into effect, provided you have not only discovered the principle, but invented some mode of carrying it into effect. But then you must start with having invented some mode of carrying the principle into effect."

Again, Page Wood, V. C., said, in Dangerfield v. Jones (13 L. T. N. S. 142), "If, having a particular purpose in view, you take the general principles of mechanics and apply one or other of them to a manufacture to which it has never been before applied, that is a sufficient ground for taking out a patent, provided that the Court sees that which has been invented is new, desirable, and for the public benefit."

In the much-debated case of Neilson v. Harford (1 W. P. C. 295) a great deal was said as to the point now before us. Neilson took out his patent in 1828 for the improved application of air to produce heat in furnaces, and in his specification declared that his invention consisted in passing a blast of air from the blowing-apparatus into an air-vessel kept heated to a considerable temperature, to a red-heat, or nearly so. and from that vessel, by means of a pipe, into the furnace; that the size of the vessel must depend on the blast, and on the heat necessary to be produced. but that the form of the vessel was immaterial to the effect, and might be adapted to the local circumstances or situation. The defendants, who were alleged to have infringed this patent, contended that it was void, as being for a principle. The Court of Exchequer admitted that it was very difficult to distinguish it from the specification of a patent for a principle; but after full consideration they thought that the plaintiff did not merely claim a principle, but a machine embodying a principle. They thought that the case must be considered as if the principle being well known, the plaintiff had first invented a mode of applying it by a mechanical apparatus to furnaces; and the invention then consisted in this—the interposition of a receptacle for heated air between the blowing-apparatus and the furnace. In the course of the argument, on motions subsequent to the trial, various observations were made

by the learned judges on the bench, to which we shall draw the reader's attention. Alderson, B., said, "The blowing-apparatus was perfectly well known; the heating of air was perfectly well known; the tuyere was perfectly well known as applicable to blast furnaces; then what he really discovered is, that it would be better to apply air heated up to red-heat, or nearly, instead of cold air. That is the principle—that is the real discovery: but in order to take out a patent, you must have an embodiment of the principle; and his embodiment of the principle is the heating of air in a separate vessel intermediately between the blowing-apparatus and the point where it enters the furnace." Then he says, "I do not mean to claim any shape in which it is done; it may be done in a vessel of any shape, provided only you have such a vessel of such a shape, and fire so applied as that, in the intermediate space between the blowing-apparatus and the furnace, the air arrives at the red-heat." And again, in reply to the argument of the plaintiff's counsel that he claimed every vessel and every shape of closed vessel in which air could be heated between the blowing-apparatus and the furnace: "Then I think that is a principle, if you claim every shape. If you claim a specific shape, and go to the jury and say that which the other people have adopted is a colourable imitation, then I can understand it. If you claim every shape, you claim a There is no difference between a principle to be carried into effect in any way you will, and claiming the principle itself. You must detail some specific mode of doing it."

The words of Lord Chief Justice Hope, in the case of the Househill Company v. Neilson (1 W. P. C. 683), may also be cited in support of the same point, and afford a commentary upon it. "A patent cannot be taken out solely for an abstract philosophical principle

-for instance, for any law of nature or any property of matter, apart from any mode of turning it to account in the practical operations of manufacture, or the business, and arts, and utilities of life. The mere discovery of such a principle is not an invention, in the patent-law sense of the term. Stating such a principle in a patent may be a promulgation of the principle, but it is no application of the principle to any practical purpose. And without that application of the principle to a practical object and end, and without the application of it to human industry or to the purposes of human enjoyment, a person cannot in the abstract appropriate a principle to himself. But a patent will be good, though the subject of the patent consists in the discovery of a great general and most comprehensive principle in science or law of nature, if that principle is by the specification applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously attained. . . . It is no longer an abstract principle. It comes to be a principle turned to account to a practical object, and applied to a special result. It becomes then not an abstract principle. which means a principle considered apart from any special purpose or practical observation, but the discovery and statement of a principle for a special purpose, that is, a practical invention, a mode of carrying a principle into effect. . . . The instant that the principle, although discovered for the first time, is stated in actual application to, and as the agent of, producing a certain specified effect, it is no longer an abstract principle; it is then clothed with the language of practical application, and receives the impress of tangible direction to the actual business of life." "Undoubtedly (said Eyre, C. J., in Boulton v. Bull, 2 H. Bl. 463, 1 Carp. 149) there can be no patent for a mere principle; but for a principle so far embodied and connected with

corporeal substances as to be in a condition to act and to produce effects in any art, trade, mystery, or manual occupation, I think there may be a patent. . . . It is not (referring to the case before him) that the patentee has conceived an abstract notion that the consumption of steam in fire-engines may be lessened, but he has discovered a practical manner of doing it, and for that practical manner of doing it he has taken his patent. Surely this is a very different thing from taking a patent for a principle; it is not for a principle, but for a process. Again, the substance of the invention is a discovery that the condensing the steam out of the cylinder, and protecting the cylinder from the external air, and keeping it hot to the degree of steam-heat, will lessen the consumption of steam. This is no abstract principle; it is in its very statement clothed with practical application."

Again, in the above-cited case of Neilson v. Harford (1 W. P. C. 295) Alderson, B., said (p. 342), "I take it that the distinction between a patent for a principle and a patent which can be supported is, that you must have an embodiment of the principle in some practical mode, described in the specification, of carrying the principle into actual effect; and then you take out your patent, not for the principle, but for the mode of carrying the principle into effect. In Watt's patent, which comes the nearest to the present of any you can suggest, the real invention of Watt was, that he discovered that by condensing steam in a separate vessel, a great saving of fuel would be effected by keeping the steam cylinder as hot as possible, and applying the cooling process to the separate vessel, and keeping it as cool as possible; whereas before, the steam was condensed in the same vessel; but then Mr. Watt carried that practically into effect by describing a mode which would effect the object. The difficulty which presses on my mind here is, that this party has taken out a patent, in substance like Watt's, for a principle, that is, the application of hot air to furnaces; but he has not practically described any mode of carrying it into effect. If he had, perhaps he might have covered all other modes as being a variation."

Minter's patent was for the invention of an improvement in the constructing of chairs, and such invention was declared to consist in the application of a selfadjusting leverage to the back and seat of a chair. whereby the weight on the seat acts as a counterbalance to the weight against the back. The patentee having obtained a verdict at the trial of an action for the infringement of the patent, it was contended, on a motion for a nonsuit, that the patentee had claimed for a principle, and not any particular means of carrying the principle into effect. Now, to a principle he was not entitled; and as to the particular means which he in fact adopted, the defendant had not used the mechanical means of the plaintiff. The plaintiff, it was further argued, had appropriated by his specification one of the first principles in mechanics, viz. the lever. "But," said Lyndhurst, C. B., "it is not a leverage only, but it is a self-adjusting leverage; and it is not a self-adjusting leverage only, but it is a self-adjusting leverage producing a particular effect, by means of which the weight on the seat counterbalances the pressure on the back of a chair." And Parke, B., said, "For the application of a self-adjusting leverage to a chair, cannot he patent that? He claims the combination of the two, no matter in what shape or way you combine them; but if you combine the self-adjusting leverage, which he thus applies to the subject of a chair, that is an infringement of the patent." Lord Lundhurst went on to say that the application of a self-adjusting leverage producing the effect constitutes the machine, and the patentee claims that machine, and the right to make it, by the application of a self-adjusting leverage producing a particular effect (*Minter* v. *Wells*, 1 W. P. C. 134).

In the case of the Electric Telegraph Company v. Brett (10 C. B. R. 838) it was argued that the giving of duplicate signals at intermediate stations was not the proper subject of a patent,—being an idea or principle only, and not a new manufacture. But it was held by the Court, that as the patentees had not only communicated the idea or principle, but showed how it might be carried into effect, viz. by appropriate apparatus at each station, the patent was valid.

So, also in Hills v. London Gas Light Company (5 H. & N. 369), an action upon a patent for the purification of coal gas by the use of hydrated oxides of iron, it was argued that as the property which these oxides possess of combining with sulphuretted hydrogen, the deleterious part of unpurified coal gas, was a perfectly well-known property, the mere application of the oxides to remove sulphuretted hydrogen from gas could not be the subject of a patent. The Court of Exchequer held that if a man were simply to say that he claimed the use of hydrated oxides of iron for the purification of gas, without saying how they were to be applied, the objection might possibly be well founded; but as the patentee had shown how the oxides were to be used, the objection failed. Ormson v. Clarke, 13 C. B. N. S. 337; in error, 14 C. B. N. s. 475.)

PROCESSES.

It will have been observed, that what the statute of King James excepts from the operation of the invalidating first clause is the privilege of the sole working or making of any manner of new manufactures. Now it seems to have been at one time doubted whether or no a new process of manufacturing a known article was embraced by these words of the statute. Perhaps, said Lord Tenterden, C. J., in the case of Rex v. Wheeler (2 B. & A. 350), the statute "may extend to a new process to be carried on by known implements, or elements acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or of a better and more useful kind." The current of decision since Lord Tenterden's time has converted what he put in a doubtful way into a certainty; for the books are full of cases which prove beyond doubt that a process is patentable. The patent contested in Gibson v. Brand (1 W. P. C. 631) was for a new or improved process or manufacture of silk. Tindal, C. J., said that as the matter turned upon another point, it was not necessary to go into the question whether a patent could be granted for a process in the strict or proper sense of the term or not, but that undoubtedly there was strong reason to suppose that such a patent might be good in law. Such certainly was the opinion of Chief Justice Eyre in Boulton v. Bull (which opinion we shall quote at length immediately), and such also appears to have been the opinion (carefully guarding against any abuse of the doctrine) of Lord Tenterden in Rex v. Wheeler.

It has been said that the doubt as to whether a process is patentable has been needlessly raised, and that it is a misuse of terms to speak of a patentable process at all. The subject-matter of the patent, it is urged, is in reality a manufacture according to a new process, and this is therefore a new manufacture. For example, in Crane v. Price (1 W. P. C. 377), the subject of the patent was, according to this view, the manufacture of iron by means of a new process, viz. the combination

of a hot-air blast and anthracite in the furnace. In Gibson v. Brand it was the manufacture of silk by a new process.

We are told by Pollock, C. B. (Stevens v. Keating, 2 W. P. C. 182), that "the real invention may be, not so much the thing when produced, as the mode in which it is produced; and its novelty may consist, not so much in its existence as a new substance, as in its being an old substance, but produced by a different In one sense, an old substance produced by a new process is a new manufacture; of that there cannot be a doubt; and therefore, although the language of the Act has been said to apply only to manufactures and not to processes, when you come to examine, either literally, or even strictly, it appears to me the expression 'manufacture' is free from objection, because, though an old thing, if made in a new way, the very making of it in a new way makes it a new manufacture. Therefore, although I think this is a patent for the process rather than the product, I think it may be a patent for the product."

Allowing this explanation its full force, it will not extend to many cases wherein it has been decided that bare processes are patentable, or to cases where patents for mere applications have been supported. ample, in Forsyth v. Riviere (1 Carp. Rep. 401), the application of a known detonating powder to the discharge of known kinds of fire-arms was held to be a patentable invention. But how could this be a manufacture? Again, in the case of Hartley's Patent (1 W. P. C. 54), it was held that the application of metal plates, made in the ordinary way, to ships and buildings, with the view of protecting them against fire, by preventing the access of air, was a patentable In neither of these cases was any new substance produced, nor any new machinery employed.

"Most certainly the exposition of the statute, as far as usage will expound it, has gone very much beyond the letter" (Eyre, C. J., in Boulton v. Bull, 1 Carp. R. 146); and Lord Chief Justice Tindal's remarks in Cornish v. Keene (1 W. P. C. 508) show the latitude of interpretation which is given to the word 'manufactures' in the Act of Parliament. "It has a very wide and extended meaning. You may call it almost in-Again, Coleridge, J., said, in Bush v. Fox (Macr. P. C. 176), manufacture includes both process and result. And in Ralston v. Smith (11 H. L. C. 223), Lord Westbury said, "By the large interpretation given to the word 'manufacture,' it not only comprehends productions, but it also comprehends the means of producing them. Therefore, in addition to the thing produced it will comprehend a new machine, or a new combination of machinery; it will comprehend a new process or an improvement of an old process."

In Newall v. Elliott (13 W. R. 11) the patent was for "improvements in apparatus employed in laying down submarine telegraph wires;" and the specification, after describing the apparatus, concluded with the following claim:—"First, coiling the wire or cable round a cone; secondly, the supports placed cylindrically outside the coil round the cone; thirdly, the use of the rings in combination with the cone as described." It was objected that the invention thus claimed was merely a mode of coiling and paying out cables, and was not a new manufacture, and could not therefore be the subject-matter of a patent. The Court, however, overruled the objection, and held the patent valid.

Previous to the patent granted to Wallington, gelatine had been made by submitting large pieces of hide to the action of caustic alkali, and by employing blood to clarify the product. Wallington's process consisted in cutting the hides into thin slices, and the use of blood

was unnecessary. This was held to be a patentable invention. (Wallington v. Dale, 7 Exch. Rep. 888.)

The observations of Chief Justice Eyre, on delivering judgment in the famous case of Boulton v. Bull (Watt's patent), are so important that we shall lay them, with little abridgment, before the reader. "It was admitted in the argument at the bar that the word 'manufacture' in the statute was of extensive signification; that it applied not only to things made, but to the practice of making, to principles carried into practice in a new manner, to new results of principles carried into practice.

"The effect produced by Hartley's invention for securing buildings from fire is no substance or composition of things; it is a mere negative quality—the absence of fire. This effect is produced by a new method of disposing iron plates in buildings. nature of things, the patent could not be for the effect produced. I think it could not be for the making the plates of iron, which, when disposed in a particular manner, produce the effect; for those are things in common use. But the invention consisting in the method of disposing those plates of iron, so as to produce their effect, and that effect being a useful and meritorious one, the patent seems to have been very properly granted to him for his method of securing buildings from fire. . . . In the list of patents with which I have been furnished, there are several for new methods of manufacturing articles in common use, where the sole merit and the whole effect produced are the saving of time and expense, and thereby lowering the price of the article, and introducing it into more general use. Now, I think these methods may be said to be new manufactures, in one of the common acceptations of the word; as we speak of the manufacture of glass, or of any other thing of that kind. The advantages to the public from improvements of this kind are, be-

yond all calculation, important to a commercial country, and the ingenuity of artists who turn their thoughts towards such improvements is in itself deserving of encouragement; and in my apprehension it is strictly agreeable to the spirit and meaning of the statute 21 James I., that it should be encouraged. . . . Probably three-fourths of all patents granted since the statute passed are for methods of operating and manufacturing, producing no new substances, and employing no new machinery. . . . If we wanted an illustration of the possible merit of a new method of operating with old machinery, we might look at the case now before the Court. If we consider into what general use fire-engines [steam-engines] are comethat our mines cannot be worked without them—that they are essentially necessary to the carrying on many of our principal manufactures—that these engines are worked at an enormous expense in coals, which, in some parts of the kingdom, can with difficulty be procured at all in large quantities—it is most manifest that any method found out for lessening the consumption of steam in these engines, which, by necessary consequence, lessens the consumption of coals expended in working them, will be of great benefit to the public as well as to the individual who thinks fit to adopt it. And shall it now be said, after we have been in the habit of seeing patents granted in the immense number in which they have been granted, for methods of using old machinery to produce substances that were old, but in a more beneficial manner, and also for producing negative qualities by which benefits result to the public, by a narrow construction of the word 'manufacture' in this statute, that there can be no patent for methods producing this new and salutary effect, connected, and intimately connected, with the trade and manufactures of the country?" (1 Carp. 146-149.)

The inventions for which valid patents have been granted may be roughly divided into the following classes:—

- 1. New contrivances applied to new objects or purposes.
- 2. New contrivances applied to old objects or purposes.
- 3. New combinations of old parts, the subject-matter consisting either of material objects or of processes.
 - 4. New methods of applying an old thing.
- 5. Processes or methods differing from old processes or methods only by the omission of a step.
- 6. Chemical processes, usually but not always in combination with mechanical contrivances.

The reader may like to have some illustrations of these classes of inventions, and we shall proceed to offer the following:—

1. Of a new contrivance applied to a new object or purpose, the following is an instance:—

Lace made from cotton had the defect of being covered with a kind of down, which injured its appearance and diminished its value. A similar defect was removed from muslin by passing it over rollers of heated iron, and from mits and stockings by the action of flame, fed by oil or alcohol. It occurred to Mr. Hall that the flame of gas might be employed in the manufacture of cotton lace; and after some failures he succeeded in inventing a method for removing the unsightly fibres by the flame of gas. A patent obtained for this invention was held good. (Hall v. Jarvis, 1 W. P. C. 100.)

2. A new contrivance employed to effect a well-known object—to make, for instance, an article previously made in a different way—is also patentable, provided that the new contrivance is attended with some degree of utility; for example, that it accomplishes the result more cheaply than the old contrivance. This is, perhaps, the largest class of patented inventions. "There may be a valid patent" (said Lord Eldon in Hill v.

Thompson, 1 W. P. C. 237) "for a new combination of materials previously in use for the same purpose, or for a new method of applying such materials."

3. A combination of known parts, producing a new result, or producing an old result in a more economical manner or more perfect form, whereby articles cheaper or better than had ever before been produced are rendered accessible to the public, such combinations will be held meritorious and patentable inventions. It was held in Crane v. Price (1 W. P. C. 408) that the combination of the hot-air blast with stone coal in the smelting of iron (the hot-air blast and stone coal having been separately in use before, but the combination being previously unknown) was an invention intended by the statute, and such as might well become the subject of a patent. It was said by Tindal, C. J., that there were numerous instances of patents where the invention consisted in no more than in the use of things already known, and acting with them in a manner already known, and producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public.

That the novel combination of old parts having a useful result may form the subject of a valid patent has been again and again decided. (Lister v. Leather, 8 E. and B. 1004; Newall v. Elliott, 10 Jur. N. s. 954; S. C. 13 W. R. 11; Murray v. Clayton, L. R. 7 C. 570; Cannington v. Nuttall, L. R. 5 H. L. 205.) "If there be" (said Lord Westbury in Spencer v. Jack, 3 De G. J. & S. 346) "a combination of several things previously well known, which combination is attended with such results of utility and advantage to the public that the combination itself is rightly denominated a substantial improvement, it is impossible to deny that that is the subject of a patent." And see further as to combinations in the chapter on the Complete Specification.

4. A new mode of applying a known thing may be the subject of a patent, provided that some ingenuity, some novelty, is exhibited in the mode of making that application, and that the application is attended by some useful result. In Watt's patent for a new method of lessening the consumption of steam and fuel in steamengines, the enclosing of the cylinder in a case of wood, or any other material that transmits heat slowly, was claimed, and allowed to be a patentable invention. (Boulton v. Bull, 2 H. Bl. 463, 1 Carp. 117.) syth's patent, for a method of discharging fire-arms, the patentee claimed the use and application of certain known fulminating compounds for this purpose. was contended that, since the properties of detonating powder were well known for other purposes, the using of such materials to discharge fire-arms was not a new manufacture for which a patent could be supported. But Abbot, C. J., stated that if the invention (i.e. this particular application of detonating powder) were new, it was such an one as might be secured by patent. The jury having found the invention to be a new one, the patentee had a verdict. (Forsyth v. Riviere, 1 Carp. 404.)

Charcoal had been used in refining sugar previously to Derosne's patent; but the old method was to mix charcoal powder with the syrup, and the new was to pass the syrup through beds of charcoal constructed in a particular manner. By the old process a considerable quantity of charcoal was taken up by the syrup, and this was an injury to the sugar. In Derosne's process this objection did not arise; and, moreover, it was applicable not only to the refinement of coarse sugar, but to the original manufacture of sugar out of cane-juice. In an action brought for infringing the patent, the originality of the invention was held not to be impeached by showing that there had been an earlier use of charcoal in the refinement of sugar. No

evidence was given that any other person, before the date of the plaintiff's patent, ever applied in use the particular mode of filtering syrup which the patent was intended to introduce: and in the absence of such evidence, Lord Abinger directed the jury to find for the plaintiff. (Derosne v. Fairie, 1 W. P. C. 154.)

In the case of Cornish v. Keene, a patent for improvements in the manufacture of elastic fabrics was contested. The patentee's object was to produce cloth from cotton flax, or other suitable material, not capable of felting, in which should be interwoven elastic cords of India-rubber coated with filamentous material. described the mode of effecting this object to be by introducing into the fabric threads of India-rubber. applied as warp or weft, or as both, according to the direction of the elasticity required—the India-rubber threads having been stretched to their utmost tension and rendered non-elastic before being introduced into the fabric, and then being rendered elastic by the application of heat. It was contended that this was not a new manufacture; that it was neither a new manufacture, nor an improvement of an old manufacture, but was merely the application of a known material, in a known manner, to a purpose known before. "That it is a manufacture" (said Tindal, C. J., delivering the judgment of the Court of Common Pleas) "can admit of no doubt; it is a vendible article, produced by the hand and art of man. Whether it is new or not, or whether it is an improvement of an old manufacture, was one of the questions for the jury, upon the evidence before them; but that it came within the description of a manufacture, and so far is an invention which may be protected by a patent, we feel no doubt whatever. The materials, indeed, are old, and have been used before; but the combination is alleged to be, and if the jury are right in their finding, is new;

and the result or production is equally so. The use of elastic threads or strands of India-rubber, previously covered by filaments wound round them, was known before; the use of yarns of cotton, or other non-elastic material, was also known before; but the placing them alternately side by side together as a warp, and combining them by means of a weft when in extreme tension, and deprived of their elasticity, appears to be new; and the result, viz. a cloth in which the non-elastic threads form a limit up to which the elastic threads may be stretched, but beyond which they cannot, and therefore cannot easily be broken, appears a production altogether new. It is a manufacture at once ingenious and simple." (1 W. P. C. 517.)

A patent was granted for an improved mode of, and apparatus for, bending wood for the handles of walking sticks, &c., and the specification described the apparatus as being a vice for holding a stick, previously softened in moist sand, placed close to a hollow mandril, on which the bending was effected by sending a jet of lighted gas into it, and then securing the stick on the mandril by a strip of steel. The heat stiffened the fibres of the wood and the curvature was rendered permanent. In a suit to restrain the defendants from infringing the patent, its validity was called in question, on the ground that the invention was not new; but Page Wood, V.C., granted the injunction, saying: "When it is stated that because wood is bent by coachmakers and others in a variety of ways by the application of heat, you cannot have a patent for the application of heat to the bending of walking sticks, that is the same sort of reasoning that was pressed on the Court with reference to an invention for an improvement on navigation. It was said that the operation of a propelling power by presenting a screw propeller to the action of water was nothing newthat it was like the action of a windmill with reference to the wind. That reasoning, however, did not succeed." (Dangerfield v. Jones, 13 L. T. N. s. 142.)

It must be carefully kept in mind, that unless there is some display of ingenuity, a patent for the application of an old contrivance to a new object will not be But it is impossible to lay down any general rule as to the amount of ingenuity which is essential to support a patent. In nice cases, there can be no certainty previous to a judicial decision on the point whether any given patent is or is not impeachable on the ground of want of ingenuity; which phrase cannot be regarded, perhaps, as different from want of novelty. All that can be done is to study the decisions already made, and to be guided by those cases which approach nearest to the one about which doubt may be felt. Some of the decisions, indeed, seem to conflict with others; and it will require a good deal of acute discrimination on the part of those who are called on to advise inventors, to distinguish the line which separates what is patentable from what is not patentable. the case of Kay v. Marshall, Lord Cottenham said, in the House of Lords, "that if Kay had discovered any means of using the machine (i.e. the ordinary spinning machine) which the world had not known before, the benefit of that he had a right to secure to himself by means of a patent; but if this mode of using the spinning machine was known before, then he could not deprive them of having the benefit of that which they enjoyed before" (2 W. P. C. 82). The reader will see how nearly such a proposition conflicts with the case of Bush v. Fox (Macr. P. C. 152).

5. A mode of manufacturing differing in nothing from an old process, except in the omission of a step, may also form the subject of a patent, as was decided in the case of Russell v. Cowley (1 W. P. C. 459). A patent had

been obtained for an invention for manufacturing iron tubes, by welding them without the use of a mandril, or internal support; and its validity being contested, it was held good. The process, from first to last, consisted in turning up the edges of a flattened metal plate until they nearly met; in heating the plate, so prepared; and in drawing it when at a welding heat through dies having a conical hole. In passing from the broader to the narrower end of the hole, the edges were compressed against each other, and were welded together; the tube was thus formed without having recourse to the old process, which required a mandril, whereon the overlapping edges of the metal plate were welded by means of hammers. It being contended that welding by pressure was not a new invention, Lord Lyndhurst read the specification as claiming only the manufacture of tubes without a mandril. By the new process, tubes could be made of greater length, of greater uniformity, and considerably cheaper, than before.

It was held in Booth v. Kennard (1 H. & N. 527), that to obtain gas by the direct distillation of clearingus seeds was a patentable invention, although gas had been previously obtained by the distillation of cil expressed from clearingus seeds.

6. Chemical processes, usually but not always in combination with mechanical contrivances, whereby something useful is produced or effected. Under this head the following examples may be given: the purification of coal gas by means of oxides, chlorides, &c. (Hills v. London Gas Company, 5 H. & N. 312); the precipitation of the solid animal and vegetable matter contained in sewage water with a view to its employment as manure (Higgs v. Goodwin, E. B. & E. 529); the preparation of dyeing materials (Steiner v. Heald, 6 Exch. 607; Simpson v. Holliday, 5 N. R. 340, L. R. 1 H. L. 315); the mixture of two or more sub-

stances in certain definite proportions forming a compound substance useful for its preservative, medicinal, or other qualities (*Muntz* v. *Foster*, 2 W. P. C. 103; *Bewley* v. *Hancock*, 6 De G. M. & G. 402).

AMOUNT OF INVENTION REQUIRED TO SUPPORT A PATENT.

In contesting the validity of a patent, it is often objected that there had been no exercise of ingenuity on the part of the alleged inventor in arriving at his invention, and that mere accident or good luck is not entitled to a patent privilege. Where, however, the utility of the invention is great, and the novelty undoubted, these facts will come in aid of an apparent want of ingenuity on the part of the inventor. point of law" (said C. J. Tindal, in Crane v. Price, 1 W. P. C. 411), "the labour of thought or experiment, and the expenditure of money, are not the essential grounds of consideration on which the question whether the invention is or is not the subject-matter of a patent ought to depend; for if the invention be new and useful to the public, it is not material whether it be the result of long experiment and profound search, or whether by some sudden and lucky thought, or mere accidental discovery." In either of the two last cases, the practical realization of a good idea must be considered a sufficiently meritorious consideration for the exclusive privilege granted to the inventor, although the actual amount of thought expended in making the invention is trifling. The case of watertabbies, so often mentioned in Westminster Hall, is a case in point. The invention (according to Mr. Justice Buller, in Boulton v. Bull, 2 H. Bl. 463, 1 Carp. 117) first owed its rise to the accident of a man spitting on a floor-cloth, which changed its colour, whence he reasoned, had his patent, and made, it is said, a considerable fortune by it.

The making of iron gas-tubes without the use of a mandril, viz. by welding them without striking them on a solid surface, "seems to be a very simple invention" (said Lyndhurst, C. B., in Russell v. Cowley); "but it has been productive of great advantages, inasmuch as it has enabled the manufacturer to construct pipes of lengths much beyond what could be done previously to this discovery" (1 W. P. C. 467). Hence the utility of the invention was apparent from the important consequences that flowed from it, and the patent was supported.

The case of Lewis v. Davis (1 W. P. C. 488) is usually cited to show that a small degree of invention suffices to sustain a patent, provided it be attended with useful results. The object of the patent was the shearing of cloth from list to list by means of rotatory cutters. Now a rotatory cutter to shear from end to end was known, and cutting from list to list by means of shears was also known. "However" (said Tenterden, C. J., to the jury, on the trial of an action for the infringement of the patent, in which the question of novelty was raised), "if before the plaintiffs' patent the cutting from list to list, and the doing that by means of rotatory cutters, were not combined, I am of opinion that this is such an invention by the plaintiffs as will entitle them to maintain the present action."

In the case of Hinks v. Safety Lighting Company (L. R. 4 Ch. D. 607), Sir George Jessel, M. R., held that the substitution of a flat wick for a solid round wick in a lamp was a sufficient ground for a patent; because, notwithstanding the apparent smallness of the invention, it had the effect of largely increasing the illuminating power of the lamp, in other words, it was a very useful invention. In giving judgment in the plaintiff's favour the learned Judge made the following remark:—"Where a slight alteration in a com-

bination turns that which was practically useless before into that which is very useful and very important, judges have considered that though the invention was small yet the result was so great as fairly to be the subject of a patent; and as far as a rough test goes, I know of no better." See also Freurson v. Loe (L. R. 9 Ch. D. 48).

With these cases compare that of Patterson v. The Gas Light and Coke Company (L. R. 2 Ch. D. 812, affirmed on appeal L. R. 3 App. Cas. 239). Here a patentee claimed the employment of sulphides of calcium in separate purifiers as a means of purifying coal gas from sulphur existing in other forms than that of sulphuretted hydrogen. Now, as it was well known to chemists, and had been long taught in books, that sulphides of calcium would absorb sulphur compounds -moreover, as it was plain that if sulphide of calcium was to be used, a separate holder must be employed, and as no special apparatus was suggested, it was held that there was no invention that would support a The same patentee also claimed a method or system of employing lime purifiers in succession, whereby the contents of all the purifiers, or any required number of them, could be converted into sulphides of calcium, and also, if required, be maintained in that condition. Now, lime purifiers in succession had been in general use for a long time, and the patentee had not devised either a new process or any new apparatus. What he really thought he had discovered was that, if the carbonic acid, which is the first thing taken up by the lime, was allowed to enter the last purifiers, it would have a deleterious effect on the purifying process. It ought, therefore, to be removed at the beginning of the operation. But this, though it might be a very useful piece of advice, and an instruction of great value, was held by the Court of Appeal not to constitute of itself the subject-matter of a patent.

In Parkes v. Stevens (L. R. 8 Eq. 358) James, V. O., was of opinion that the substitution of a slide for a hinge in the door of a lamp could not be the foundation of a valid patent.

SECOND PATENTS.

In Lister v. Leather (8 E. & B. 1004) it was held that a second patent for an improvement on an invention which is the subject of a previous patent afterwards assigned to the second patentee is not void as being contrary to public policy. And the same rule holds good in regard to a second patent obtained by the same inventor. The argument that the second patent prolongs the monopoly granted by the first until the expiration of the second is answered by the fact that the former invention without the improvement is free as soon as the earlier patent comes to an end. See further as to Second Patents in the Index.

CHAPTER III.

THE INCIDENTS OF UTILITY AND NOVELTY WHICH MUST BY LAW ACCOMPANY PATENTABLE INVENTIONS.

THE two chief incidents which are required by law to attend every invention that claims the protection of letters patent, are Utility and Novelty.

If a material part of the alleged invention should turn out to be either not useful or not novel, the patent is altogether void, the legal maxim utile per inutile being here disregarded. (See Crossley v. Beverley, 1 W. P. C. 106; Hill v. Thompson, 1 W. P. C. 249; Manton v. Parker (1 W. P. C. 192 n.; Dav. P. C. 327; Blozam v. Elsee, 6 B. & C. 169; 1 Carp. 444.) And in like manner, where several distinct inventions are included in one patent, of which some only are useful or novel, the useless or old invention or inventions will invalidate the whole patent. (Turner v. Winter. 1 W. P. C. 77; 1 T. R. 602; Bloxam v. Elsee, 6 B. & C. 178; Morgan v. Seaward, 1 W. P. C. 196; Kay v. Marshall, 2 W. P. C. 71). The Crown having been misled as to the extent of the invention, the grant of letters patent in respect of it is void. It was on this principle that the Court, in deciding Morgan v. Seaward, looked at the cases of Hill v. Thompson (1 W. P. C. 237), and Brunton v. Hawkes (4 B. & A. 541); in which a patent for several inventions was held to be altogether void, because one was not new. The want of novelty is a fatal defect by the express wording of the statute, so far as relates to that which is old; and the whole patent is rendered void by the construction that the consideration for the grant is the novelty of all the

parts, which consideration failing, or as it is sometimes expressed, the Crown being deceived, the patent is void.

The questions as to the utility and novelty of the inventions, in respect of which a patent is sought, or has been granted, are consequently of the utmost importance, and it will be necessary to go into the matter at some length. And first, as to the question of

UTILITY.

If an invention contains no degree of usefulness whatever, over and above inventions already known, then the patent is void. (*Manton* v. *Parker*, Dav. P. C. 327; W. P. C. 192 n. *Manton* v. *Manton*, Dav. P. C. 348.)

"A mere trifling matter" (said Page Wood, V. C., in Dangerfield v. Jones, 13 L. T. N. s. 142) "or a thing of no value will not do, inasmuch as the whole theory of the patent law is based upon the assumption that it is something of real value. You must show that you have invented something useful, a new and useful improvement in manufacture."

A patent for a useless invention is thought by some to be void at common-law; by others, by force of the Statute of Monopolies, which renders void grants of privileges which tend to the hurt of trade, or are gene-For if a monopoly were allowed rally inconvenient. in a useless invention, other persons would be prevented from improving it, or turning it to any account whatever, so that combinations of utility might be impeded. It would stand in the way of real inventors, and hence be mischievous to the public generally. (See the observations of Parke, B., in Morgan v. Seaward, 1 W. P. C. 196.) On the trial of Palmer v. Wagstaff, at Nisi Prius (Newton's Lond. Journ. vol. xliii. p. 151), Chief Baron Pollock said that, in legal language it is a fraud on the law of patents for any person to take out a patent with a view to the obstruction of improvements. The evidence showed that the plaintiff's patent, which it was alleged the defendant had infringed, had never been worked; no attempt had been made to bring the candles of the patented construction before the public; and the patent was only then brought into play, for the purpose of stopping the defendant from a course of improvement.

"A patent for an invention which is merely to obstruct every subsequent improvement, which is to step in and prevent the exercise of the ingenuity of mankind and the introduction of other inventions adapted to the particular subject to which the invention may be applicable, cannot, in my judgment, be supported." (Per Pollock, C. B., in Crossley v. Potter. Macr. P. C. 240.)

It is to be observed that the recital in the Letters Patent of the Crown's willingness "to give encouragement to all arts and inventions which may be for the public good," clearly points to the quality of utility as one of the considerations for the grant, which failing, the patent will be invalid.

It is for the jury, not the Court, to decide the question of utility when the point has been raised by appropriate pleadings; and the question will go before them in the general shape of utility or no utility. They have not to consider to what extent the invention is useful, but only whether it is of any use at all. Mr. Baron Parke, in Neilson v. Harford (1 W. P. C. 314), speaking of a patent for the use of hot-blasts in furnaces, laid it down, that if the apparatus were an improvement, so as to be productive, practically, of some

¹ That the patentee must go into proof of the utility of his invention in case that issue is raised is shown by what fell from the Judges in the cases of Rex v. Arkwright, Dav. P. C. 138; Manton v. Parker, Dav. P. C. 327; Manton v. Manton, Dav. P. C. 333; Bovill v. Moore, Dav. P. C. 399; Brunton v. Hawkes, 4 B. & Ald. 541; Russell v. Cowley, 1 W. P. C. 467; Hill v. Thompson, 1 W. P. C. 237; Minter v. Wills, 1 W. P. C. 129; Crans v. Price, 1 W. P. C. 411; Derosne v. Fairie, 5 Tyr. 393; 2 Cr. M. & R. 476.

beneficial result, no matter how great, provided it is sufficient to make it worth while (the expense being taken into consideration) to adapt such an apparatus to the ordinary machinery in all cases of forges, cupolas, and furnaces, where the blast is used, then that there would be utility sufficient to support the patent. The quantum of improvement (should an improvement be in dispute) is not a material point; it is enough that they can find any improvement. (Alderson, B., in Morgan v. Seaward, 1 W. P. C. 172, 186.) In other words, in order to quash a patent on this ground, a jury must expressly find that the invention is of no use.

But it must be kept in mind, that it is the *invention* which is required to possess utility, not merely the thing produced. As *Pollock*, C. B., remarked, on trying the case of *Palmer* v. *Wagstaff* (above cited), it is not sufficient for the maintaining of a patent to prove that the article produced under it is useful; it must be the invention that effects the utility. Thus a patented manufacture should be either better in quality, or cheaper in cost, than that which it is intended to supplant.

The uselessness of part of an invention, however, will not be allowed to vitiate the patent, unless that part is described as something essential. The case of Lewis v. Marling (1 W. P. C. 490), arose out of a patent for an improved machine for shearing woollen cloths, in which the patentee claimed, amongst other things, the use of a brush for raising the wool on the surface of the cloth to be shorn, but not as an essential part of the machine. Before any machine was made for sale, this part of the invention was discovered to be useless, and no machines were ever sold with the brush attached. It was contended that this uselessness of part vitiated the whole, but Lord Tenterden said, "If the patentee mentions that as an essential

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ingredient in the patent article which is not so, nor even useful, and whereby he misleads the public, his patent may be void; but it would be very hard to say that this patent should be void, because the plaintiffs claim to be the inventors of a certain part of the machine not described as essential, and which turns out not to be useful." Bayley, J., thought that if the patentee had known the brush to be unnecessary, the patent would be bad, on the ground that this was a deception; but if he believed it to be proper, and only by a subsequent discovery found out that it was not necessary, it would form no ground of objection.

In the case of Haworth v. Hardcastle (1 W. P. C. 480), the jury found specially that the invention was useful upon the whole, but that the machine was not useful in some cases. The judges of the Court of C. P. held that this finding of the jury did not negative the utility of the machine in the generality of cases, but rather led to the inference that in the generality of cases it was useful, in which event the patent would be valid, and it was accordingly supported.

One good test of the utility of an invention is afforded by showing that an improvement of the trade (using these words in their commercial sense) has taken place in consequence of it. The invention patented by Lord Dudley consisted in substituting pit-coal for charcoal in the manufacture of iron. Neilson patented a process of smelting iron by blowing the furnace with hot in place of cold air. Crane smelted iron by means of anthracite instead of ordinary fuel, and combined the hot-blast with this. All these processes were productive of great improvements in the manufacture of iron, and the patents were all supported by the Courts.

Brunton took out a patent for an improvement in chain cables, which consisted in making the links with

straight sides and circular ends, in place of twisted links, and in substituting a cast-iron stay with broad ends embracing the sides of each link for a wrought-iron stay formerly fixed across the middle of the opening of the link to prevent it collapsing. The combination of a link with a stay of those particular forms was considered so far new, although the form of the link had been previously known, that the inventor would have had the benefit of his patent, upon his showing that the combination operated beneficially, if the patent had been obtained for this combination alone (Brunton v. Hawkes, 1 Carp. R. 412).

It has been said from the Bench, that the fact of a published invention not meeting with public acceptance, is some presumption against its utility. It is something for a jury to take into consideration, when the question of utility is raised before them, that a machine has not been called for by the public (Morgan v. Seaward, 1 W. P. C. 186). See also Re Simister's Patent (1 W. P. C. 721; 4 Moo. P. C. C. 164); Re Bakewell's Patent (15 Moo. P. C. C. 386); Re Allan's Patent (L. R. 1 P. C. 507).

We now turn to the question of

NOVELTY.

The statute of James declares excepted from the invalidating clause "all letters patent and grants of privilege of the sole working or making of any manner of new manufactures to the true and first inventor of such manufactures, which others at the time of making such letters patent and grants should not use." Moreover, letters patent invariably contain a clause, avoiding the grant in case the invention "is not a new invention as to the public use and exercise thereof." Two distinct issues on the point of novelty are usually raised upon the pleadings when a patent is in con-

troversy-1st, Whether the patentee is the 'true and first' inventor of the patented invention; and 2nd, Whether the subject-matter of the patent is a new invention as to the public use and exercise thereof. "Sometimes" (said Tindal, C. J., in Cornish v. Keene, 1 W. P. C. 507) "it is a material question to determine whether the party who got the patent was the real and original inventor or not; because these patents are granted as a reward, not only for the benefit that is conferred upon the public by the discovery, but also to the ingenuity of the first inventor; and though it is proved that it is a new discovery so far as the world is concerned, yet if anybody is able to show that although that was new, that the party who got the patent was not the man whose ingenuity first discovered it, that he had borrowed it from A or B, or taken it from a book that was printed in England, and which was open to all the world, then, although the public had the benefit of it, it would become an important question whether he was the first and original inventor of it."

It cannot, however, be objected to a patent that the invention is wanting in novelty, because something, with a similar object, has already been made the subject of a patent by another inventor; provided that the means by which the object is attempted to be accomplished are substantially different in the two cases.

Kneller obtained a patent for an apparatus for the evaporation of liquids and solutions at a low temperature. The apparatus consisted of pipes or tubes, along which air was forced nearly to the bottom of the vessel containing the liquid to be evaporated, which air, passing through small holes in the submerged tubes, traversed the liquid and carried off the aqueous particles. The invalidity of this patent was attempted to be proved by showing that an invention having a

similar object in view had been previously patented. But when it appeared that this invention consisted in propelling a quantity of heated air into the lower part of the vessel containing the liquid, and causing such air to pass through the liquid in streams, by means of a perforated coil of pipe or colander, the jury found that, although the substance of both inventions consisted in forcing air in finely-divided streams through a fluid, for the purpose of facilitating evaporation, yet the modes by which this was effected in the two cases were sufficiently distinct to acquit the latter invention of being a piracy of the former; and that the latter patent was not invalidated by reason of want of novelty in the invention. The Court was of the same opinion, upon the application for a rule to set this verdict aside. (Hullett v. Hague, 1 Carp. Rep. 501; 2 B. and A. 370.)

In Minter v. Mower (1 W. P. C. 140), it appeared that the plaintiff had taken out a patent for an improvement in reclining chairs, consisting in the application of a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the pressure against the back. the defendant, made chairs in imitation of Minter's chair, and contended, in an action for infringing the patent, that the plaintiff was not the first and true inventor, alleging that one Brown had, previous to the patent, made chairs embodying a similar principle. It appeared, however, that although Brown's chair contained a similar principle to that patented, it was encumbered with machinery which rendered it a very different thing from the plaintiff's. Lord Denman said that, supposing Brown's chair to have been a chair with a self-adjusting leverage (i.e. a chair similar to the plaintiff's), if the encumbering additional part had been away, "then the question is, whether the principle of self-adjustment was at all discoverable or thought

of at that time. Because, it seems to me, if that principle might have been deduced from the machinery of the chair that was made, but it was so encumbered and connected with other machinery that nobody did make that discovery, or ever found out that they could have a chair with a self-adjusting leverage, by reason of that or any other defect in the chair actually made; it seems to me that does not prevent this from being a new invention, when the plaintiff says, I have discovered, throwing aside everything but this self-adjusting leverage itself, something that will produce an effect, which I think a very beneficial one."

The case of Losh v. Hague (1 W. P. C. 202) may be advantageously compared with that of Minter v. Mower. Losh's patent was for improvements in the wheels of railway carriages, and these improvements consisted in constructing the pieces composing the entire wheel of malleable iron, and then welding them together. was contended by the defendant that the invention was not new, inasmuch as one Paton had, previous to the date of Losh's patent, and under a patent of his own, specified a mode of constructing wheels, not, however, for railways, since railways did not then exist. which wheels were of wrought iron, and differed little, if at all, from those patented by Losh; moreover, that although the first wheel made under Paton's patent was riveted, all Paton's other wheels, thirty pairs in number, were made with the circumference of the inner rim entirely of wrought iron, and then welded into "The question you have to try," said one piece. Lord Abinger to the jury, "on the originality of Losh's invention, is not whether Paton's patent contains that perfect periphery that is required in this case, but whether wheels have been publicly made on this prin-(The jury by their verdict found that wheels had been previously made on the same principle as

Losh's wheels.) "If," continued his lordship, "the wheels had been made and sold to any one individual, the public's not wanting them because there were no railways, their not being adapted to any particular use, which at that time was open to the public to apply them to, makes no difference. You have it in evidence that these wheels were made in the first instance; that thirty pairs were made with a complete continuous circumference all round. If they were so made and sold, or used at all, though not for any purpose that then made them popular or desirable, still they are made with that particular advantage which is claimed by Losh's patent, namely, a periphery made of one continuous piece of wrought iron, as well as the spokes. But that is not all the evidence; there are two parties One Horsefall says that he refrom Manchester. members, nearly twenty-eight years ago, that there were three trucks, having each three wheels, and those wheels were made of wrought iron spokes in a wrought iron circumference, and there is one exhibited before you which was actually in use at that time; the other, Roberts, confirms that, and has stated that they existed for many years, and that they have been used."

It may be well also to refer to the case of Macnamara v. Hulse (2 W. P. C. 128 n.) which was an action for an infringement of a patent for a method of paving streets with blocks in the form of two solid rhombs placed one in front of the other, in opposite directions, so that each side of a block was bevelled both inwards and outwards. It was proved that the defendant used blocks, each consisting of a single solid rhomb, and then fastened two together by pins, so that two of the defendant's blocks thus fastened exactly resembled one of the plaintiff's blocks. This was the infringement complained of. The defendant, at the trial, put in the specification of an expired patent, obtained by

one M'Arthy, for a pavement in which each block had two bevels inwards and two outwards on the same If M'Arthy's block were cut into two, it would make two blocks similar to the plaintiff's; if cut into four, it would make four blocks similar to the defen-Both judge and jury thought that, under these circumstances, the plaintiff's invention was destitute of The plaintiff asserted that the defendant had infringed his patent by cutting his block into two. The defendant showed that the plaintiff, in forming his block, had only cut M'Arthy's block into two. The plaintiff, in support of his own patent, was bound to contend that M'Arthy's invention and his own were distinct; but then it followed that his own and the defendant's were likewise distinct, in which case there was no infringement.

In Lewis v. Marling (1 W. P. C. 496), Bayley, J., said, "If I make a discovery, and am enabled to produce an effect from my own experiments, judgment, and skill, it is no objection that some one else has made a similar discovery in his mind, unless it has become public." And Parke, J., said, "There is no case in which a patentee has been deprived of the benefit of his invention because another had also invented it, unless he had also brought it into use." Again, in the case of Hill v. Thompson (1 W. P. C. 244), Dallas, J., said, "It is not enough to have discovered what was unknown to others before, if the discovery be confined to the knowledge of the party having made it; but it must have been communicated more or less, or it must have been more or less made use of, so as to constitute discovery as applied to subjects of this sort."

The evidence given in Lewis v. Marling, to impugn the patentee's claim of novelty, was that several years previously a similar machine was in use at New York, and that a specification had been sent over in 1811 to a person residing at Leeds, who employed two engineers to manufacture a machine from it, which was never finished, in consequence of disturbances amongst the populace. The specification was shown to several persons; but the machine was never brought into use. In 1816, a model of a machine for shearing from list to list, by means of a rotatory cutter, was brought over from America, and shown to two or three persons in the manufactory of the importer; but no machine was ever made from it, nor was it publicly known to exist. Moreover, one Coxon, many years previously, had made a machine to shear from list to list, and this was tried by a person called as a witness; but he did not think it answered, and soon discontinued the use of it. Lord Tenterden told the jury that if it could be shown that the patentee had seen the model or specification, that might rebut the claim of invention; but there was no evidence of that kind; and he left it to them to say whether the invention had been in public use and operation before the granting of the patent. found that it had not; and on the motion for a new trial, the Judges thought there was no reason to find fault with the verdict.

In charging the jury assembled to try the action of Cornish v. Keene (1 W. P. C. 508), Tindal, C. J., said, that "if the invention was at the time the letters patent were granted in any degree of general use; if it was known at all to the world publicly, and practised openly, so that any other person might have the means of acquiring the knowledge of it as well as the person who obtained the patent, then the letters patent are void. Now it will be a question for you to say whether, upon the evidence which you have heard, you are satisfied that the invention was or was not in public use and operation at the time the letters patent were granted. It is obvious that there are certain

Kmits to that question; the bringing it within that precise description which I have just given, must depend upon the particular facts which are brought before a jury. A man may make experiments in his own closet for the purpose of improving any art or manufacture in public use; if he makes these experiments, and never communicates them to the world, and lays them by as forgotten things, another person who has made the same experiments, or has gone a little further, or is satisfied with the experiments, may take out a patent and protect himself in the sole making of the article for fourteen years; and it will be no answer to him to say that another person before him made the same experiments, and therefore that he was not the first discoverer of it, because there may be many discoverers starting at the same time, many rivals that may be running on the same road at the same time, and the first that comes to the Crown and takes out a patent, it not being generally known to the public, is the man who has the right to clothe himself with the authority of the patent and enjoy its benefits. That would be an extreme case on one side; but if the evidence, when properly considered, classes itself under the description of experiment only, and unsuccessful experiment, that would be no answer to the validity of the patent. On the other hand, the use of an article may be so general as to be almost uni-In a case like that you can hardly suppose that any one would incur the expense and trouble of taking out a patent. That would be a case where all mankind would say, 'You have no right to step in and take that which is in almost universal use, for that is, in fact, to create a monopoly to yourself in this article without either giving the benefit to the world of the new discovery, or the personal right to the value of the patent, to which you would be entitled

from your ingenuity and from your application.' Therefore it must be between these two limits that cases will range themselves in evidence; and it must be for a jury to say whether, supposing those points to be out of the question in any particular case, the evidence which has been brought before them convinces them that the subject of the patent was in public use and operation at that time, at the time when the patent itself was granted by the Crown. If it was in public use and operation, then the patent is a void patent, and amounts to a monopoly; if it was not, the patent stands good."

Hancock v. Somervell (reported in Newton's L. J., vol. 39, p. 158) is a case in which peculiar circumstances were adduced in evidence for the purpose of rebutting the claim to novelty. Hancock's patent was for improvements in the preparation of caoutchouc, and the invention consisted in combining sulphur with the caoutchouc, which rendered it elastic at all temperatures. The defendants imported from America shoes made of caoutchouc, which, when analyzed, were found to contain sulphur along with oxide of lead and other ingredients. In an action for an infringement of the patent it was proved in evidence, that previous to the date of the plaintiff's patent specimens of caoutchouc prepared by sulphur were sent to England by Goodyear, of New York, and were shown to Hancock, but the secret of the manufacture was not communi-Negotiations were commenced for the cated to him. sale of the invention to Hancock, but never com-It was stated in evidence that Goodyear's agent left specimens with Hancock, supposing that it would not be possible for him to discover the process by which it was prepared. However, Hancock made experiments, and discovered that sulphur endowed caoutchouc with the property of elasticity at all temperatures, and he then took out his patent. Mr. Justice Williams left it to the jury to say whether, supposing the shoes to have been manufactured in England, they could have been made without infringing the plaintiff's patent; and then he proceeded to make these remarks upon the novelty issues:--"The defendants do not deny that Hancock is to be considered the inventor. notwithstanding Goodyear had previously made the discovery, provided the invention had not been published or in use in this country before the date of the The defence consists of this-not only had Goodyear discovered the invention first, but also that the invention had been substantially published, and was in use, not in secret use, but in public use before the date of the patent; that the material being inpublic use, the ready means of the invention were also necessarily before the public; because it is said the article presented in itself such means of knowledge to the public as to enable any one of ordinary competence to reproduce the article. If you should be of opinion that the material was in use before the date of the patent, then the question resolves itself into this: what is your opinion as to whether the publication of the material was substantially a publication of the invention? If you should find that the material was in public use, but that, notwithstanding, the invention remained still a matter to be discovered. in my opinion the plaintiff's case would not be affected by the circumstance of the material being in public If, on the other hand, you should think not only that the material was in public use (and I should here say that I do not think it is necessary the use should be actual sale—if it were in public use it need not be sold; it would be sufficient, for instance, if it were in use, handing about the country for the purpose of attracting customers); if you should think, also,

that the material being so in use, it was so palpable how you could make it, when you got the material, that substantially the disclosure of the material was a disclosure of the means of making it;—if you do not think that, then I think the plaintiff's case is unaffected by the circumstance of the material being before the public in the way I have been describing." The jury found a verdict for the plaintiff.

On the trial of Muntz v. Foster (2 W. P. C. 103-108). Tindal, C. J., said to the jury, with reference to the issue as to the novelty of the invention—"I look upon the invention to consist in this, that Muntz has by an experiment ascertained that a certain mixture of the alloy of zinc with copper will have the effect of producing a better sheathing, by reason and by means of its oxydating just in sufficient quantities—that is, not too much, so as to wear away and impair the sheathing and render the vessel unsafe, but enough, at the same time, to keep by its wearing the bottom of the vessel clean from those impurities which before attached And if it was shown (as possibly it might be) that sheets had been made of metal before, in the same proportion which he had pointed out, and if this hidden virtue or quality had not been discovered or ascertained, and consequently the application never made, I cannot think the patent will fail on that I look upon it that there is as much merit in discovering the hidden and concealed virtue of a compound alloy of metal, as there would be in discovering an unknown quality which a natural earth or stone possessed. We know, by the cases that have been determined, that where such unknown qualities have, from the result of experiments, been applied to useful purposes of life, that such application has been considered as the ground, and the proper ground, of a patent; and, therefore, when I come to

that part of the case in which they seek to show this is not so, because these metal plates have been invented before—that is, persons have used them before—in my judgment it will not go far enough, unless they can show there has been some application of them before to this very useful purpose. . . . I do not think that the circumstance of showing that the combination of these two materials in a metal plate will of itself destroy this patent, when no attention at the time was paid to the purpose for which this patent was taken out. and it was made merely in the ordinary course of melters of metals for the various and ordinary purposes I do not think that the circumstances of showing, that in the long time that has passed before us in the different, and I may say infinitely varying, combinations that must have been made for the various purposes for which brass and other metal was manufactured for ordinary and common purposes of life—to call a workman to show that on some occasion or occasions he had combined them in those proportions for another and different purpose; it does not appear to me that such destroys the patent."

The fact that there had previously been made a useless machine which turned out a failure will not invalidate the right of a patentee who has made a successful machine with the same object, although there may be a certain degree of similarity between some of the details of the two machines (*Murray* v. *Clayton*, 7 L. R. Ch. 570).

Neither is a patent rendered invalid by the fact that the invention includes the subject-matter of a patent previously obtained, and not yet expired (Crane v. Price, 1 W. P. C. 413; Lister v. Leather, 8 E. and B. 1004). Of course, the second patentee must obtain the first patentee's licence before working his own patent, or he will lay himself open to an action for an

infringement as long as the earlier patent remains in force; and, of course, there must be some amount of new invention in addition to the previous invention, otherwise there is nothing to afford a foundation for a patent.

The existence of a patent for a certain application of a given thing '(which thing is not new) will not vitiate a subsequent patent for another application of the same thing, provided that the two applications are perfectly distinct, and that the second application is not in any way comprised in the specification under the first patent. One Vaucher took out a patent for an improvement in packing hydraulic and other machines by means of a lining of soft metal, whereby certain parts of the machines were rendered air-tight and water-tight. was subsequently discovered by one Newton, that the same material, soft metal, could be usefully employed in diminishing the friction of machinery in rapid motion, and in preventing the generation of heat, by applying it to the surfaces in contact. It was held, in an action for an infringement of Vaucher's patent, that the two applications of soft metal were essentially different, and consequently that Newton's invention was new, and his patent good (Newton v. Vaucher, 6 Exch. Rep. 859).

Under a patent for the purification of gas, Mr. Croll specified for the use of oxides of iron, which expression was held to mean both hydrated and anhydrous oxides of iron. Hills afterwards obtained a patent for the use of anhydrous oxide of iron for the same purpose; but it was said, in an action which he brought for the infringement of his patent, that he had been anticipated by Croll. On his part it was argued that as it was a fact that some oxides would answer the object in view, and some would not, it became a subject for investigation and experiment to ascertain what oxides it would be proper to employ, and that when he had made the

discovery he was entitled to a patent in respect of it. The Court of Exchequer held that this discovery might properly be the subject of a patent. (Hills v. London Gas Light Co., 5 H. and N. 312.)

A patent is not deprived of the attribute of novelty because in the interval between its date and the date of the specification the invention has been made public. One Desgrande took out a patent in November, 1832, and enrolled his specification in May, 1833. Sievier's patent was dated in January, 1833, and his specification in July of the same year; but the article made under this patent was publicly manufactured and largely sold in the intervening March and April. Assuming the invention in these two patents to be the same, it was contended that the latter patent was void for want of novelty; but after argument in the Court of C. P., it was held that the facts did not warrant such a construction. (Cornish v. Keene, 1 W. P. C. 519.)

When the pleadings in an action upon a patent raise the issue of the novelty of the invention, the use in public of that invention, prior to the date of the patent, may be given in evidence; and if this can be proved to the satisfaction of the jury, the patent is void. The previous use of an invention may have been open, notorious, and general; or it may have been practised only by one or two persons, under circumstances which leave it doubtful whether the user was a public user. It therefore becomes necessary to inquire

WHAT IS PUBLIC USER?

One of the first cases which the books contain was decided in 1798. Tennant brought an action for an infringement of a patent which he had obtained for a method of using calcareous earths instead of alkaline substances in bleaching. It was proved on the one

hand, that bleachers were generally ignorant of the patented bleaching liquor until after the date of the On the other hand, it was proved that a certain bleacher had used the same method of preparing bleaching-liquor for five or six years previous to the date of the patent; and that the method had been kept secret from all except his two partners, and two servants employed in preparing the liquor. On this evidence the plaintiff was nonsuited, the previous user being held to render the patent invalid (Dav. P. C. 429; 1 W. P. C. 125). The case of Carpenter v. Smith (1 W. P. C. 530) arose out of an alleged infringement of a patent for an improved lock. "I think," said Lord Abinger to the jury, "that what is meant by 'public use and exercise' is this: a man is entitled to a patent for a new invention, and if his invention is new and useful, he shall not be prejudiced by any other man having invented that before, and not made any use of it; because the mere speculations of ingenious men, which may be fruitful of a great variety of inventions, if they are not brought into actual use, ought not to stand in the way of other men equally ingenious, who may afterwards make the same inventions and apply them. great many patents have been taken out, for example, upon suggestions made in a celebrated work by the Marquis of Worcester, and many patents have been derived from hints and speculations by that ingenious But yet, as he never acted upon them, as he never brought out any machines whatsoever, those patents are good. So that the meaning of these words. public use, is this: that a man shall not, by his own private invention, which he keeps locked up in his own breast, or in his own desk, and never communicates it, take away the right which another man has to a patent for the same invention. Now 'public use' means this: that the use of it shall not be secret but

public. If a man invents a thing for his own use, whether he sells it or not,-if he invents a lock, and puts it on his own gate, and has used it for a dozen years, that is a public use of it. If it were otherwise, see what the consequence would be. If Mr. Davies has a lock which he has directed to be made (we may suppose that to be the case) and put on his gate some twenty years ago-sixteen years ago, at least; if that was not a public use which prevented a man from taking out a patent, any man might go and take a model of that lock, and get a patent for it. How can he be the inventor of it? Because, to obtain a patent a man must be the inventor; and if it has been once in public use, that is, used in a public manner, not used by the public, yet if it has been used by half-a-dozen individuals, or one, in a public manner, any man having access to it, how can he be said to be the inventor, if by merely gaining access to that he takes out a patent? For recollect that the words of the statute show that the patentee is to be the inventor. And one of the questions you have to try is, whether he is the inventor, as well as whether there is any novelty in the invention. A man cannot be said to be the inventor of that which has been exposed to public view, and which he might have had access to if he had thought fit." The same judge subsequently said, in the same case, "If you are of opinion (not that they were generally adopted by the public and used by the public, for that,

[&]quot;If a person" (asked Dallas, J., Hill v. Thompson, 1 W. P. C. 240) "had done precisely all that is specified to be done in this specification, and had not communicated it to any one, could he be prohibited by the patent from doing that which he had done before, though known to no one but himself; or could it be considered as new, if practised by only one person, but not communicated to the world?" And Tindal, C. J., in Cornick v. Keene (1 W. P. C. 511), observed that "if the defendants had shown that they practised it (i.e. the patented invention), and produced the same result in their factory before the time the patent was obtained, they cannot be prevented by the subsequent patent from going on with that which they have done."

in my opinion, is a perfect fallacy) that the use of them is public, and the exercise of the invention was public, and not kept secret so that the public might have no benefit from it, then I think that part of the issue you ought to find for the defendant." The learned judge summed up the evidence as to a public user, in this way: -Twenty-six years ago, Freer, a trader living in Birmingham, produced to Tilsley a model of a lock. and desired him to make six dozen like it, and afterwards a dozen-and-a-half. Tilsley employed Walker to execute the order, and gave him the model. locks were made, and Freer paid for them. you have an article manufactured by an English manufacturer, and sold; and in my opinion, if it was sold even for the assumed purpose of being sent to America. I cannot but think that that would be a destruction of the novelty of the plaintiff's invention. When a model is sent to a workman, who sells seven-and-ahalf dozen, and sells them for a certain price, I must say I think the invention was used and publicly exercised. There is no secrecy in the manufacture of them: it is not shut up in the closet of the workman who makes them, but the man who makes them gives directions to another workman; he sells them for his own profit. And I think it would be the hardest thing in the world if the Walkers were now to use that model, and make locks of the same description, if they were to be told to-day, 'You cannot do that without violating Carpenter's patent, although you did it twentysix years ago, and made a profit by your manufacture of it.' "

These observations of Lord Abinger were made at the trial of an action which terminated in favour of the defendant. On the motion for a new trial, on the ground of misdirection, the judges of the Court of Exchequer expressed themselves satisfied with his lordship's view of the law, and refused a rule, Alderson, B., saying that "public use means a use in public, so as to come to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in his chamber."

At the trial of Hancock v. Somervell (reported in Newton's London Journal, vol. 39, p. 158), Mr. Justice Williams told the jury, that in order to rebut the patentee's claim of novelty, it was not necessary that the alleged invention should have been used by the public; it was sufficient if it were shown to have been in use in public, in contradistinction to secret use.

The point as to public use was again raised in an action for infringing a patent for paving streets with wooden blocks. It was shown at the trial, that some time before the date of the patent, the carriage way of the porch of Sir W. Worsley's dwelling-house in Yorkshire had been laid with blocks of wood, on a system apparently similar to the plaintiff's. Cresswell, J., told the jury, that if they thought the plaintiff's method of constructing the wooden pavement was the same as that adopted at Sir W. Worsley's, there was an end of the case; for the invention must be deemed to have been made public. It had been publicly used, and made known to all persons who went to the house, so far as ocular inspection could acquaint them with it. Whether it had been used by one or used by five, the learned judge thought made no dif-(Stead v. Williams, 2 W. P. C. 136.)

In another action for infringing the same patent brought against another defendant, it was proved that the pavement at Sir W. Worsley's was on a different principle from the plaintiff's. Parke, B., told the jury, that if the mode of forming and laying the blocks at Sir W. Worsley's had been precisely similar to the plaintiff's that would have been a sufficient user to

destroy the plaintiff's patent, though put in practice in a spot to which the public had not free access. (Stead v. Anderson, 2 W. P. C. 149.)

The question of public user arose in the case of Heath v. Smith (2 W. P. C. 268). The patent was one out of which much litigation arose. The invention claimed was an improved method of making cast-steel. by fusing carburet of manganese along with common iron or steel. The pleadings in an action for an infringement of this patent having raised the question of the novelty of the invention, it was proved at the trial that five manufacturers of steel had used substantially the process patented by the plaintiff before the date of his patent, not by way of experiment, but in the way of their trade, and to the extent of hundreds of tons. Two of the manufacturers had kept the process a secret. The other three had openly practised it; but it had not become generally known, and the trade was not made acquainted with it until the plaintiff took out his patent. It was held, after argument, by the Court of Queen's Bench, that there had been a public use of the process, and that the patent was, therefore, invalid. One of the judges pointed out this consequence of an opposite decision, that a man who made a discovery would be obliged to take out a patent for it in order to free himself from liability to action in the event of another man making the same discovery and procuring a patent. The process adopted by the five manufacturers was to place iron, manganese, and carbon in a crucible. The application of heat, according to the scientific witnesses, made first a carburet of manganese, and then made that substance unite with the iron. Now the Court of Exchequer Chamber had previously held that this process was an infringement of the patent, the specification of which claimed "the use of carburet of manganese in any process for the conversion of iron into cast-steel; for although the plaintiff only mentioned carburet as a well-known substance which he put into the crucible, his patent was held to cover every mode of operating whereby carburet of manganese, however formed, was made to act upon iron. The result by the two processes was identical. The process used by Smith, the defendant in this action, was similar to that of the five manufacturers. If it was the same as the plaintiff's, he had a good defence; for the process was not new, and the plaintiff's patent was invalid: if it was not the same as the plaintiff's, then there was no infringement.

Where the defendants at the trial of an action for the infringement of a patent for a method of manufacturing penholders, proved that they had made penholders according to the method which the plaintiff afterwards patented, and that such penholders had been placed in their warehouse for sale, though no sale was proved, *Jervis*, C. J., the presiding judge, held that the plaintiff's invention was destitute of novelty. (Mullins v. Hart, 3 Car. & K. 297.)

It may here be stated that when previous public user of the invention is relied upon as ground of the invalidity of a patent, it is not necessary to show that such user continued up to the time of the patent being granted. Even if discontinued, the patent will be invalidated. (The Househill Co. v. Neilson, 1 W. P. C. 709, in the House of Lords.) Their lordships, however, in delivering judgment in this case, expressly left it an open question, whether, if an invention had been formerly used and abandoned many years before, and the whole thing had been lost sight of, the patent would or would not stand.

The point whether prior secret user is sufficient to vitiate a patent has never been judicially decided; but we have a dictum of Mr. Justice Erle, uttered in the

above case of *Heath* v. *Smith*—" If one party only," said that learned judge, "had used the process, and had brought out the article for profit, and kept the method entirely secret, I am not prepared to say that then the patent would have been valid."

PRIOR USER BY INVENTOR.

We now come to a series of cases which declare the law with regard to a user of the patented invention before the date of the patent—not by other persons than the patentee, but by the patentee himself. If such a user by the patentee be tantamount to a publication of the invention, then the patent is just as invalid as if the invention had been publicly exercised by others. What, then, is the kind of user which will have this fatal effect upon the patent privilege?

In Bramah v. Hardcastle (Holroyd, 81), which was an action for infringing a patent for a water-closet, it appeared that the patentee had made two or three of these machines before he obtained his patent; but it was admitted that this fact would not of itself invalidate the patent.

If, however, the article has been manufactured for sale, and offered for sale, although not sold, this will be such a user of the invention as will render a subsequently obtained patent bad. (Oxley v. Holden, 8 C. B. N. s. 666.)

But where delay occurs in the issue of a patent without the patentee's fault, the manufacture of articles before the date of the patent for the purpose of being sold after the date, will not render the patent invalid. (Betts v. Menzies, 4 Jur. N. s. 477.)

In Wood v. Zimmer (Holt, N. P. 57) it appeared in evidence that a great quantity of verdigris made according to the patented process had been sold by the inventor in the course of four months before the patent was obtained, and *Gibbs*, C. J., held that "the public sale of that which is afterwards made the subject of a patent, though sold by the inventor only, makes the patent void."

In Morgan v. Seaward (1 W. P. C. 194), an action which arose out of Galloway's patent for improvements in machinery for propelling vessels, which consisted in an improved method of constructing paddle-wheels, it was given in evidence that before the date of the patent, Curtis, an English engineer, made for Morgan, the managing director of the Venice and Trieste Company, two pairs of wheels, upon the principle mentioned in the patent. Galloway, the patentee, gave instructions to Curtis under an injunction of secrecy, because he was about to take out a patent. The wheels were completed and put together at Curtis's factory, but not shown or exposed to the view of those who might happen to come there. After remaining a short time, the wheels were taken to pieces, packed up in cases, and sent to Venice in April, 1829. Curtis deposed that they were sold to the company, without saying by whom, and Morgan paid Curtis for them. Galloway obtained a patent on the 22nd of July, 1829, and it was assigned by him to Morgan. Upon these facts it was contended, in an action against Seaward and others, for an infringement of the patent, that the invention, at the date of the letters patent, was not new, in the legal sense of that word. Parke, B., delivered the judgment of the Court of Exchequer, before whom the point was argued, in these words:--"The word 'manufacture' in the statute must be construed in one of two ways: it may mean the machine when completed, or the mode of constructing the machine. If it mean the former, undoubtedly there has been no use of the machine, as a machine, in England, either

by the patentee himself or any other person; nor, indeed, any use of the machine in a foreign country before the date of the patent. If the term 'manufacture' be construed to mean 'the mode of constructing the machine,' there has been no use or exercise of it in England, in any sense which can be called 'public.' The wheels were constructed under the direction of the inventor, by an engineer and his servants, with an injunction of secrecy, on the express ground that the inventor was about to take out a patent, and that injunction was observed; and this makes the case, so far, the same as if they had been constructed by the inventor's own hands, in his own private workshop, and no third person had seen them whilst in progress. operation, indeed, was disclosed to the plaintiff Morgan; but there is sufficient evidence that Morgan at that time was connected with the inventor, and designing to take a share in the patent. A disclosure of the nature of the invention to such a person under such circumstances must surely be considered private and confidential. The only remaining circumstance is. that Morgan paid for the machines, with the privity of Galloway, on behalf of the steam company; but there was no proof that he paid more than the price of the machines, as for ordinary work of that description; and the jury would also be well warranted in finding that he did so with the intention that the machine should be used abroad only by this company, which, as it carried on its transactions in a foreign country, may be considered as a foreign company;, and the question is, whether this solitary transaction, without any gain being proved to be derived thereby to the patentee or to the plaintiff, be a use or exercise in England of the mode of construction in any sense which can be deemed a use by others, or a public use. within the meaning of the statute and the patent. We

It must be admitted that if the patentee think not. himself had, before his patent, constructed machines for sale, as an article of commerce, for gain to himself, and been in the practice of selling them publiclythat is, to any one of the public who would buy—the invention would not be new at the date of the patent. This was laid down in the case of Wood v. Zimmer, and appears to be founded on reason; for if the inventor could sell his invention, keeping the secret to himself, and when it was likely to be discovered by another take out a patent, he might have practically a monopoly for a much longer period than fourteen years. Nor are we prepared to say that if such a sale was of articles that were only fit for a foreign market, or to be used abroad, it would make any difference; not that a single instance of such a sale, as an article of commerce, to any one who chose to buy, might not be deemed the commencement of such a practice, and the public use of the invention, so as to defeat the patent. But we do not think that the patent is defeated on the ground of the want of novelty, and the previous public use or exercise of it, by a single instance of a transaction such as this, between the parties connected as Galloway and the plaintiff are, which is not like the case of a sale to any individual of the public who might wish to buy; in which it does not appear that the patentee has sold the article, or is to derive any profit from the construction of his machine, nor that Morgan himself is; and in which the pecuniary payment may be referred merely to an ordinary compensation for the labour and skill of the engineer actually employed in constructing the machine; and the transaction might, upon the evidence, be no more in effect than that Galloway's own servants had made the wheels; that Morgan had paid them for the labour, and afterwards sent the wheels to be used by his own co-partners abroad. To hold this to be what is usually called a publication of the invention in England, would be to defeat a patent by much slighter circumstances than have yet been permitted to have that effect."

An inventor does not lose his right to a patent by keeping his invention to himself after its completion, provided there is no profitable user of it (Bentley v. Fleming, 1 C. & K. 587). But it may be remarked that, although not destructive of his right, delay is here especially dangerous, and the fact might, under certain circumstances, be used as a strong argument against a patentee.

Adamson invented certain machinery whilst engaged in the execution of a contract for the erection of a pier. This machinery he used on the works for four months before he applied for a patent, and during this time the public had access to it. It was held that there had been public user, inasmuch as he had derived a profit from the employment of the invention after its utility had been ascertained, and during all that time the public had free access to it, so that he was not entitled to a patent. (Re Adamson's Patent, 6 De G. M. & G. 420.)

From these cases it is evident that an inventor intending to patent his invention should be extremely cautious how he deals with his invention previous to his obtaining the patent. An inventor may, it seems, safely deposit a machine of his invention, for a reasonable time, in a room open to the public, for the purpose of having its properties tested. (Bentley v. Fleming, 1 C. & K. 587.)

It was decided by the House of Lords, in the case of Brown v. Annandale (1 W. P. C. 433), affirming the decision of Roebuck v. Stirling (1 W. P. C. 45), that the public use of an invention in England, prior to the date of letters patent in Scotland, renders such

letters patent void, although the invention was new as regards Scotland. If this decision were followed out to its logical consequences, the public use of an invention in any one of our colonies, however remote or obscure, would invalidate a patent subsequently granted to an original inventor in England in respect of a similar invention.

EXPERIMENTS.

But it is well-settled law, that when the disclosure of the secret took place only during the course of trying experiments, with a view to test or improve the invention (such disclosure being unavoidable and not more than was necessary for the purpose), this will not vitiate the inventor's right to a patent. Nor will the previous experiments of other persons have that effect, if such experiments did not result in the realization of the discovery. Few patents, indeed, could be sustained if previous experiments, approaching the patented invention, were held to vitiate them. In almost every case experiments of some kind or other have been made in the same track, and many beneficial inventions have been but a step beyond what has before been reached by experiments which seemed fruitless, and were abandoned.

In Galloway v. Bleaden (1 W. P. C. 525), Tindal, C. J., said, "A mere experiment, or a mere course of experiments, for the purpose of producing a result which is not brought to its completion, but begins and ends in uncertain experiments, that is not such an invention as should prevent another person, who is more successful, or pursues with greater industry the chain in the line that has been laid out for him by the preceding inventor, from availing himself of it and having the benefit of it." His lordship, with reference

to the case before him, afterwards remarked, "that there had been many experiments made upon the same line, and almost tending, if not entirely, to the same result, is clear from the testimony you have heard; and that these were experiments known to various But if they rested on experiment only, and had not attained the object for which the patent was taken out, mere experiment, afterwards supposed by the parties to be fruitless, and abandoned because they had not brought it to a complete result, that will not prevent a more successful competitor who may avail himself, so far as his predecessors have gone, of their discoveries, and add the last link of improvement in bringing it to perfection." See also the observations of the same learned judge in Cornish v. Keene (1 W. P. C. 508).

In Jones v. Pearce (1 W. P. C. 124), an action brought for an infringement of a patent for an improved construction of carriage-wheels, it was contended, on behalf of the defendants, that the invention was not new, wheels similar in principle to those for which a patent had been obtained having been invented by a Mr. Strutt several years previously, made under his orders, and used in a cart employed to convey heavy loads of stones on the public roads for upwards of a year. These wheels were afterwards laid by, the spokes having occasionally got bent. Patteson, J., told the jury, that if Strutt's wheel was, in substance, the same wheel as the patentee's, and if it had been "used openly in public, so that everybody might see it, and had continued to use the same thing up to the time of taking out the patent, undoubtedly, then, that would be a ground to say that the plaintiff's

¹ This part of the learned judge's charge cannot be considered law since the decision of the House of Lords in *The Househill Co. v. Neilson (ante, p. 53)*. And see the remarks of *Page Wood, V. C.*, on *Jones v. Pearce*, in *Tangye v. Stott* (14 W. R. 128).

invention is not new. But if, on the other hand, you are of opinion that Mr. Strutt's was an experiment, and that he found it did not answer, and ceased to use it altogether, and abandoned it as useless, and nobody else followed it up, and that the plaintiff's invention, which came afterwards, was his own invention, and remedied the defects of Mr. Strutt's wheel, then there is no reason for saying that the plaintiff's patent is not good."

The question whether the evidence amounts to proof of public use, or whether it only proves that abandoned experiments had been made, is frequently of considerable delicacy; since, as it has been remarked from the Bench, a slight alteration in the effect of the evidence will establish either the one proposition or the other, and the only proper mode of deciding it is by leaving it to the jury. (Cornish v. Keene, 1 W. P. C. 519.)

On the trial of an action for infringing a patent for improvements in cards for carding fibrous substances, which improvements consisted in using caoutchouc as a substitute for leather as an elastic bed in which the teeth were fixed, it was given in evidence, in support of a plea denying the novelty of the invention, that a certain material, called Hancock's patent leather, had been made and sold previous to the patent; and it was suggested, rather than proved, that this material was substantially the same thing as the elastic bed in which the carding teeth were fixed. It appeared that the patent leather had been supplied to certain manufacturing firms, during the space of about a year and a half, several years before the date of the patent, and that it had been used in the construction of cards, but had not been employed for that purpose since that "Supposing," said Cresswell, J., to the jury, "that the article (Hancock's patent leather) did embody the principle of the plaintiff, so as to present to persons using it the properties, qualities, and advantages in principle of that article which the plaintiff makes, the question for you will be, whether that user is not to be considered rather in the nature of an experiment than of any public use of the article, so as to deprive the plaintiff of the fruit of his discovery in respect of this manufacture" (Walton v. Bateman, 1 W. P. C. 619).

At the trial of Stead v. Williams (2 W. P. C. 135), Cresswell, J., said to the jury, "I take it that there is a great difference between the knowledge of an invention as a thing that would answer and was in use, and the knowledge of it as a mere experiment that had been found to be a failure, and thrown aside. If a person has had a scheme in his head and has carried it out, but after a trial has thrown it aside, and the thing is forgotten and gone by, then another person re-introducing it may, within the meaning of the Act, be the inventor and the first user of it, so as to justify a patent."

Where a series of experiments performed in the presence of others is not only successful, but is actually of pecuniary benefit to the inventor, it will not necessarily be held that he has given the invention to the world. That the coincidence of actual immediate profit with the carrying on of experiments is not of itself sufficient to render a subsequently obtained patent void, was decided in the case of Newall v. Elliott (4 C. B. N. s. 269), where it appeared that the inventor of a machine for paying out telegraph wire had not procured a patent until after he had laid down a cable in deep sea by means of the machine. Experiments on dry land had been indecisive; an opportunity for making decisive experiments was presented in the course of executing a government contract for

laying down a cable at sea. Such experiments were made, and the Court held that they did not amount to a gift of the invention to the world.

In Hills v. London Gas Light Co. (5 H. & N. 312), it appeared that one Croll had purified many thousand feet of gas by a mode for which Hills subsequently obtained a patent, and this gas was sold. The jury, on the trial of an action brought by Hills for the infringement of his patent, found that this was by way of experiment, and the Court refused to disturb the verdict. In delivering judgment on the defendants' rule for a new trial, the Court said, "the word 'experiment,' in the cases referred to, has been used, not as the sole test upon a matter of this sort, but as indicating a class of practice, and for the purpose of showing that if there has been a user of an invention not of a substantial character, but in the character of an experiment, then, although the thing has been done before, it does not preclude a person from taking out a patent for it; so that although what Croll did may not have been strictly in the nature of an experiment, still the jury have so found it, and we cannot grant a new trial."

We will now adduce some instances of patents which were adjudged bad on the ground of want of novelty in the invention generally.

Brunton took out a patent for (amongst other things) an alleged improvement in anchors. The two flukes were made in one, and had such a thickness of metal in the middle, that they might there be pierced with a hole for the insertion of the shank. Previously, the two flukes had been joined by welding them to the shank. It came out on a trial in Court, that the real improvement was in the avoidance of welding, and

that this was done by means perfectly well-known in There was no proof that the anchors other cases. made by the new process were better than those previously made, and since the invention seemed to be nothing more than the adoption of a known operation practised in analogous cases, it was held not patentable. (Brunton v. Hawkes, 4 B. & Ald. 540.) "Now" (said Abbott, C. J., in his judgment) "a patent for a machine, each part of which was in use before, but in which the combination of different parts is new and a new result is produced, is good, because there is novelty in the combination. But here the case is perfectly different: formerly three pieces were united together; the plaintiff (Brunton) only unites two: and if the union of these two had been effected in a mode unknown before, as applied in any degree to similar purposes, I should have thought it a good ground for a patent; but unfortunately the mode was well known and long practised. I think that a man cannot be entitled to a patent for uniting two things instead of three, where that union is effected in a mode well known and long practised for a similar purpose." (Brunton v. Hawkes, 1 Carp. Rep. 410.)

In the case of Kay v. Marshall (2 W. P. C. 34-84), it appeared that Kay had procured a patent for new and improved machinery for preparing and spinning flax, and the invention was declared in the specification to consist of new machinery for macerating flax previous to drawing and spinning it; and also for improved machinery for spinning the same after having been so prepared. If the patent had been confined to the new machinery for macerating, it was allowed that it would have been perfectly good; but, as to the second part of the invention, it appeared that the improved machinery was nothing more than the placing of certain portions of a machine well known and in

common use within two inches and a half of each other, instead of at a greater distance. It was shown that the distances between the parts in question had not been fixed in previous machines, but had been varied according to circumstances; and, further, that the reach used in cotton spinning had actually been less than two inches and a half. It was held by the Court of Common Pleas, that the adoption of a particular distance, viz. two inches and a half, under these circumstances, did not constitute such an invention as would support a patent. "Suppose," said Tindal, C. J., on delivering judgment—" suppose a patent to have been first obtained for some entirely new method, either chemical or mechanical, of reducing the fibres of flax to a short staple, we think that a second patent could not be taken out for an improved mode of machinery in spinning flax which consisted of nothing more than the spinning of short staple of flax by a spinning machine of a reach of a given length, not less than that already in use for the spinning of cotton, the effect of which would be to prevent the first patentee from working his invention with the old machine at the proper reach." Or, as Lord Cottenham put it in the House of Lords, if the plaintiff (Kay) has a right to tell the rest of the world that they shall not use the common spinning machine with rollers at two and a half inches' distance, then the existence of the patent deprives all the rest of the world of the right of using the ordinary spinning machine in the form in which they had a right to use it before the patent was granted.

In the process of calendering woven fabrics the use of a roller and a bowl, and the means of regulating the relative speed of their motions, were well known. In the process of *calendering*, the roller was smooth, and the speeds of the roller and bowl were different. In embossing, the roller had a pattern upon it, and the speeds of the roller and bowl were equal. A patent was taken out for a combination of a patterned roller with a bowl moving at unequal speeds. The invention was held not to be a 'new manufacture' which could be the subject of a valid patent. Although the patentee might have discovered how to use an existing machine more beneficially than the owner knew of (viz. by making the patterned roller and the bowl move at different speeds instead of at the same speed, and by moving the fabric transversely when fed up), he had no right to prohibit the owner from using his property as he thought fit. (Ralston v. Smith, 9 C. B. N. s. 117; affirmed by the House of Lords, 11 H. L. C. 223.)

PATENTS FOR "APPLICATIONS."

What are commonly termed patents for "applications" are those by which it is sought to protect inventions having reference to the application of an existing article to a purpose for which other similar articles have been previously used; or to the application of a well-known process to produce a well-known article; or to the application of a well-known process to effect a result in a well-known article after the same process had been publicly applied to an analo-When there is nothing new in the gous article. machinery or methods employed, patents for such applications are not favoured by the law, which looks upon the inventions as wanting in the attribute of The rule is well established that the mere application in a new manner of an old mechanical contrivance to an analogous purpose is not an invention for which a patent can be granted. "In all the cases in which a patent has been supported" (said Lord

Campbell in Brook v. Aston, 8 E. & B. 478), "there has been some discovery, some invention. It has not been merely the application of the old machinery in the old manner to an analogous substance. That cannot be the subject of a patent."

The casting of tubular boilers in one piece, similar boilers having been previously made in several pieces which were afterwards fastened together by means of cement, was held not to be an invention for which a valid patent could be obtained, although the result was useful and beneficial to the public. It was only the application of a well-known article, viz. iron, by a well-known process, viz. casting, to the production of a well-known article, tubular boilers. (Ormson v. Clark, 13 C. B. N. S. 337; S. C. in error, 14 C. B. N. S. 475.)

Again, the application of double-angle iron (a well-known article of commerce already applied to a variety of purposes) to the construction of hydraulic joints of telescopic gas-holders, instead of making them of two pieces of single-angle iron attached to a plate, was held not to be patentable. (Horton v. Mabon, 12 C. B. N. S. 437; S. C. in error, 16 C. B. N. S. 141.)

From what was said in Mackelcan v. Rennie (13 C. B. N. s. 61), it would appear that the Court considered that the application in the construction of a known apparatus of a material not before used for that purpose, for example, iron instead of timber in the construction of floating docks, was not an invention for which a valid patent would be obtained. "The use of a new material to produce a known article is not the subject of a patent," said Malins, V. C., in Rushton v. Crawley (L. R. 10 Eq. 522), a case where a man had taken out a patent for the use of a kind of wool called Russian tops in the manufacture of artificial hair. (See also Thompson v. James, 32 Beav. 570.)

In the case of Losh v. Hague (1 W. P. C. 202), the question was reduced to this-Is a man who finds a particular construction of wheel already in use for carriages on ordinary roads entitled to a patent for applying it to railway carriages, such application not having been previously made? Lord Abinger remarked that you cannot have a patent for applying a well-known thing, capable of being applied to fifty thousand different purposes, to an operation which is exactly analogous to what was done before. His lordship put this case—"Suppose a man invents a pair of scissors to cut cloth with; if the scissors were never invented before, he could take out a patent for it. If another man found he could cut silk with them, why should he take out a patent for that?" Again-"It would be a very extraordinary thing to say, that after all mankind have been accustomed to eat soup with a spoon, that a man could take out a patent because he says you might eat peas with a spoon."

In an action brought by the assignee of a patent for improvements in separating the fibres of cocoa-nut husks, for an alleged infringement, it was shown that the principal part of the invention consisted in passing the split husks between crushing rollers, and that, for some time previous to the date of the patent, similar rollers had been employed in treating hemp. Lord Campbell, who presided at the trial, told the jury that the use of the crushing rollers having been thus anticipated, no claim for their application to the crushing of cocoa-nut husks would hold good. (Hyde v. Trent, Newton's Lond. Jour. vol. 45, p. 135.)

So, in the case of the Queen v. Cutler (Macrory's Pat. Ca. 124-138), it was held by two judges on different occasions, that the mere application of a known article to a new use, the mode of application not being new, but having been previously used in applying

analogous articles to the same purpose, cannot be made the subject of a patent. In this case the patent was for improvements in the construction of the tubular flues of steam boilers. The specification claimed the application of iron tubes coated with copper or brass to this purpose. This kind of tube was not new; nor was there any novelty in the way the patentee applied the tubes in the formation of flues, uncovered tubes having been previously used in a similar way.

In The Patent Bottle Envelope Co. v. Seymer (5 C. B. w. s. 164), it was held that the use of a model or mandril in the form of a bottle in making envelopes for bottles out of rushes or straw, could not be the subject of a patent, this being merely the application of a well-known tool to work previously untried materials or to produce new forms. And in Tetley v. Easton (2 C. B. w. s. 706) it was decided that the discovery that a particular advantage may be obtained by the use of a known machine used in a known manner is not patentable. See also White v. Toms (37 L. J. Ch. 204.)

On the trial at Nisi Prius of Bush v. Fox (Macr. P. C. 163), it appeared that the invention, for an infringement of which the action was brought, consisted in the use of a caisson or hollow cylinder for building under water. It was proved at the trial that a similar caisson for building on land had been described in the specification of a patent granted several years previously. This was only a new application of a machine previously known and applied to another purpose. "I think" (said Pollock, C. B., to the jury) "that a man cannot, if he has applied—supposing this to be a new application—an old invention, or part of an old invention, to a new purpose, obtain a patent for such an invention. Both the plaintiff and the other witness say that the invention

consists in the application, and not in the novelty of the thing itself—in other words, that the only novelty is in the application of the apparatus. I think that a patent cannot be taken out for such an application. If a man were to take out a patent for a telescope to be used to make observations on land, I do not think any one could say, 'I will take out another patent for that telescope to be used for making observations on When the legal points raised at the trial were argued in the Exchequer Chamber, Maule, J., said, "Assuming that the machine itself is old, the learned judge held that a mere new application is not a new manufacture, and therefore not the subject of a patent; and my present opinion is, that, on the evidence. he was right in so directing the jury" (Macr. P. C. The case having been taken to the House of 175). Lords (Macr. P. C. 179), it was there held that the judge who tried the case had rightly directed the jury.

In Brook v. Aston (8 E. & B. 478), the plaintiffs had obtained a verdict in an action for an infringement of their patent granted in 1856, for improvements in finishing yarns of wool and hair; but the defendant obtained leave to move to enter the verdict in his favour if the Court should be of opinion that the patent was invalid. It appeared that the plaintiff had obtained a patent in 1853, for a process precisely similar except that it was applicable to the finishing of cotton and linen yarns. After argument, the Court held that as the alleged invention under the later patent was only the application of an old machine to a new purpose, there had been no improvement or discovery for which a patent could be obtained. It was destitute of novelty, being merely the application to woollen and hair yarn of the machine previously patented and then applied to cotton and linen varn. This decision was affirmed by the Court of Exchequer Chamber (5 Jur. n. s. 1025).

The case of Harwood v. The Great Northern Railway Company (2 B. & S. 194; affirmed by the House of Lords, 11 H. L. C. 654), may also be consulted with reference to the same point. In this case a patent for the application of "fishes" to iron rails for railways, for the purpose of securing them, was held invalid, because a similar contrivance had been applied to fasten pieces of timber together in the construction of bridges, and had also been used in various articles of machinery. As Mr. Justice Willes said, the invention for which the patent had been obtained was "the mere application of an old contrivance on the old way to an analogous subject without novelty or invention in the mode of applying such old contrivance to the new purpose."

Jordan's specification claimed the construction of ships with an iron frame combined with an external covering of timber planking for the sides, bilges, and bottoms. At the trial of an action for an infringement of the patent, it appeared that a combination of wood and iron in the construction of ships was well known previous to the patent, and that frames partly of iron and partly of wood had been coated with iron. The jury having returned a verdict in favour of the plaintiff, the patentee, a rule was obtained for leave to enter a verdict for the defendant on the ground that the invention was not patentable. The Court decided that as iron and wood had both been long used in the construction of vessels, the application of wooden planking to the iron frame of a vessel, without any peculiarity in the nature of that planking, could not be the subject-matter of a patent. The alleged invention was not only the substitution of one wellknown and analogous material for another—that is,

wood for iron—to effect the same purpose on an iron vessel, but it was the application of the same old invention, viz. planking with timber, which had been formerly done on a wooden frame, to an analogous purpose on an iron frame. (Jordan v. Moore, L. R. 1 C. P. 624.)

In Parkes v. Stevens (L. R. 8 Eq. 358, affirmed L. R. 5 Ch. 36) it was held that the invention of a spherical lamp with a sliding door was not patentable, as it was proved that cylindrical lamps with sliding doors had been previously in use.

Compare the preceding cases with Penn v. Bibby (L. R. 2 Ch. 127). Penn obtained a patent for an improvement in bearings and bushes for the shafts of screw propellers, which consisted in grooving the inner surfaces of the bearings of the shaft, and placing in the grooves strips of wood, which projected beyond the inner surface of the metal bearings, so as to support the rubbing action of the shaft whilst water was allowed to circulate freely in the intermediate channels. The metal bearings previously employed had been found unable to withstand for any length of time the friction of the screw shaft, and it almost seemed as if the screw propeller would have to be abandoned; but Mr. Penn's simple contrivance got over the difficulty, and the invention came into general use. contended that the alleged invention was merely a new application of an old and well-known thing, viz. wood, and the wooden bearings of grindstones and waterwheels were adduced as showing that the inven-"In every case of this description was not novel. tion" (said Lord Chelmsford), "one main consideration seems to be whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but to require some application of thought and

study. Now, strictly applying this test to the present case, it appears to me impossible to say that the patentee's invention is merely the application of an old thing to a new purpose. The only examples of old use . . . are of a totally different character, and for a totally different object. It is difficult to believe that bearings of this description could ever have suggested the application of wood to the bearings of screw propellers in the way described in the patent."

The same distinction which it has been seen is made between mechanical applications brought about by an exercise of the inventive faculty and those destitute of any trace of it, holds good with regard to the applications of the chemical properties of matter. Thus, in Calvert v. Ashburn (Pract. Mech. Journal, vol. vii. 2nd ser. 97), it was held that the application of caustic alkalies for the purpose of dissolving the gluten contained in flour employed in the manufacture of size could not be the subject of a patent, inasmuch as caustic alkalies had been previously used for the purpose of dissolving gluten in the manufacture of starch. See also the observations of Lord Hatherley and Lord Blackburn in Bailey v. Roberton (L. R. 3 App. Cas. 1055, 1073, 1079).

This case, in which the amount of invention was adjudged too small to support the patent, should be compared with that of Young v. Fernie (4 Giff. 597, 612), a suit for an injunction to restrain the infringement of a patent for obtaining paraffin oil by the distillation of bituminous coals, wherein it was proved that previously to the plaintiff's invention paraffin oil had been extracted from bituminous shale by distillation. It was argued for the defendants, on the authority of The Queen v. Cutler, Brook v. Aston, and such cases, that bituminous shale being a substance analogous to bituminous coal, the invention of the plaintiff

was not in law the subject of a patent. But Stuart, V. C., said that there seemed to be no analogy between the cases cited and the present one. And in giving judgment in favour of the validity of the patent, his Honour observed: "Inventions in mechanics are as widely different from inventions in economical chemistry as the laws and operations of mechanical forces differ from the laws of chemical affinities, and the results of analysis and experiment in the comparatively infant science of chemistry, with its boundless field of undiscovered laws and undiscovered substances. This observation, as applied to reported cases, will strike the mind of every lawyer who has even a slight elementary knowledge of both sciences." (See also the case of Muntz v. Foster, ante, p. 44.)

TRUE AND FIRST INVENTOR.

Having so far examined the decisions which bear upon the question of the novelty of the invention, we may now turn to those which have reference to the patentee, who must, as we have seen, be the true and first inventor, or he will not be entitled to hold his patent. A discovery may be both useful and quite new to the world at large; yet if the person who has attempted to secure the benefit of it by patent should not be the inventor, and the first and true inventor, his patent is not saved from the clause in the statute of James, which declares that all monopolies are invalid. Let us therefore inquire what construction the courts have put upon the words, "first and true inventor."

One of the earliest cases on this subject is that of Dollond, the optician, who brought an action for an infringement of his patent for a new method of making the object-glasses of refracting telescopes. It was alleged, on the part of the defendant, that Dollond was not the true and first inventor of the method, in-

asmuch as Dr. Hall had made the discovery before him. But it was holden that as Dr. Hall had confined it to his closet, and had not communicated it to the public, Dollond was to be considered the first and true inventor as required by the statute. This decision has been frequently mentioned in subsequent cases, and always with approval.

The case was not reported, and our knowledge of it is derived from the mention made of it in the subsequent case of Boulton v. Bull (2 H. Bl. 469). Dollond's case was decided in 1766, and it was followed by numerous cases, the result of which may be thus stated:—If two persons make the same invention about the same time independently of each other, he who first obtains a patent has an exclusive right to the invention (Forsyth v. Riviere, Chit. Prerog. Ca. 182); and he will be held the first inventor, although, in point of fact, the date of his invention was subsequent to that of the other person. This rule, however, will not hold where there was such a use of the invention previous to the patent as amounted to what is technically called "public use."

"A man may publish to the world," said Tindal, C. J., in Gibson v. Brand (1 W. P. C. 628), "that which is perfectly new in all its uses, and has not before been enjoyed, and yet he may not be first and true inventor; he may have borrowed it from some other person; he may have taken it from a book; he may have learnt it from a specification; and then the legislature never intended that a person who had taken all his knowledge from another, from the labours and assiduity or ingenuity of another, should be the man who was to receive the benefit of another's skill."

There are many substances which have been produced by chemists in their laboratories in small quantities, which, if they could be produced in large

quantities so as to be merchantable commodities, would be highly valuable. An inventor who succeeds in doing this will not be considered to have been forestalled because the substance has been already produced on a small scale as a chemical curiosity. He will be held to have been the first and true inventor, and his patent will be supported because he has introduced a new manufacture. "What the law looks to," said Stuart, V. C., in the great case of Young v. Fernie (4 Giff. 611), "is the inventor and discoverer who finds out and introduces a manufacture which supplies the market for useful and economical purposes with an article which was previously little more than the ornament of a museum. The plaintiff is an inventor of this class, and his patent is entitled to the protection of the law. I find that he has ascertained by a course of laborious experiment a particular class of materials among many, and a particular process among many, which has enabled him to create and introduce to the public a useful manufacture, which amply supplies the market with that which, until the use of the materials and processes and temperature indicated by him, had never been supplied for commercial purposes. At the date of his patent something remained to be ascertained which was necessary for the useful application of the chemical discovery of paraffin and paraffin oil. This brings it within the principle stated by Westbury, L. C., in the case of Hills v. Evans. The manufacture with the materials and process indicated by him according to the sense in which I understand the word 'manufacture' to be used in the statute, was a new manufacture not in use at the date of his patent."

It may happen that a given invention results from the combined operation of two minds, in which case it

¹ Reported 4 De G. F. & J. 288.

is necessary that the letters patent should be taken out in their joint names.

Patents have sometimes been disputed on the ground that the patentee owed a material part of the invention to another person; and if this can be made out on satisfactory evidence, it is fatal. It must, however, be taken to be undoubted law, that the suggestions of workmen employed by the inventor to carry out his ideas will have no such effect. An inventor is entitled to something more than the mere manual labour of the persons he employs. If the substantial part and leading idea, the principle of an invention, belong to one person, he may properly call in the assistance of another to work it out and improve it; and after obtaining the benefit of that assistance, he may legally procure a patent for the invention. The observations of Alderson, J., to the jury on trying Minter v. Wells (1 W. P. C. 132), will throw light upon this point. "Minter [the patentee] and Sutton [a workman employed by Minter were together about the time the invention took place: which of the two suggested the invention, and which carried it into effect, is a question for you to decide. If Sutton suggested the principle to Minter, then he would be the inventor. If, on the other hand, Minter suggested the principle to Sutton, and Sutton was assisting him, then Minter would be the first and true inventor, and Sutton would be a machine, so to speak, which Minter uses for the purpose of enabling him to carry his original conception into effect. You will judge which is the more probable of the two. Minter makes out his prima facie case; he is the person who takes out the patent. If Sutton has received a compensation, nothing would have been more simple and easy than that he should have taken out the patent, and still Minter might have had the same benefit to-day; and there is no apparent

reason why Sutton should not have taken out the patent which Minter has taken out, unless they were both desirous to ruin the invention; for, suppose two persons are engaged on an invention of this description, they know perfectly well between themselves who is the real inventor of it, and who is the workman to carry into effect the conception; but they would destroy the value of it to both, if they did not take it out in the name of the right person."

In Bloxam v. Elsee (1 Carp. Rep. 434), an action brought for an infringement of a patent for making paper in sheets very much larger than had previously been made, it was objected that many of the improvements set out in the specification were invented, not by the patentees, but by Mr. Donkin, and without them the invention was useless. Mr. Donkin was called. and proved that he was employed by the patentees to bring the machine to perfection, was paid by them for so doing, and was acting as their servant. contended, in reply, that these were the patentees' inventions, and that Mr. Donkin was employed by them to carry their ideas into effect in the best man-This view of the case seems to have been that of the Judge presiding at the trial, and that of the Judges before whom the motion for a nonsuit was argued; for although the patent was declared invalid, it was on other grounds, nothing being said on this point.

In Allen v. Rawson (1 C. B. 551), a case where the validity of a patent for improvements in the manufacture of felted fabrics was contested on the ground that parts of the invention owed their origin to two workmen, it was held that more convenient modes of carrying out the main principle of an invention and subordinate improvements suggested by persons in the employment of the patentee may be safely adopted

by him and embodied in his specification. "I take the law to be" (said Mr. Justice Erle, before whom the action for an infringement was tried), "that if a person has discovered an improved principle and employs engineers' agents or other persons to assist him in carrying out that principle, and they in the course of experiments arising from that employment make valuable discoveries accessory to the main principle. and tending to carry that out in a better manner, such improvements are the property of the inventor of the original improved principle, and may be embodied in his patent; and if so embodied the patent is not avoided by evidence that the agent or servant made the suggestions of the subordinate improvement of the primary and improved principle." When a new trial was moved for, on the ground that the judge had misdirected the jury, it was refused. On that occasion Tindal, C. J., said, "It would be difficult to define how far the suggestions of a workman employed in the construction of a machine are to be considered as distinct inventions by him, so as to avoid a patent incorporating them taken out by his employer. case must depend upon its own merits. But when we see that the principle and object of an invention are complete without it, I think it is too much that a suggestion of a workman employed in the course of the experiments, of something calculated more easily to carry into effect the conceptions of the inventor, should render the patent void."

This is a very different case, however, from that where the patentee has no closer connection with the invention than that of being simply the employer of the inventor. Thus, in Arkwright's case, it appeared that Arkwright, the patentee, had been told of a particular roller, part of the machinery by Kay, and that, perceiving the value of the invention, he took Kay into

his service for two years, during which time he employed him to make models, and subsequently claimed the invention as his own, making it the foundation of a patent. Arkwright adopted in the same way a crank invented by Hargrave. In the face of this evidence, Arkwright's claim to be the first and true inventor fell to the ground. (The King v. Arkwright, Dav. P. C. 61; 1 W. P. C. 64.) The case of Barker v. Shaw (1 W. P. C. 126 n.) touches the same point. In an action for the infringement of a patent for an improvement in making hats, a witness proved that he had made the improvement whilst employed in the patentee's workshop, whereupon the plaintiff was non-suited.

In these cases, it was clear that the patentee was not the first and true inventor, since the source of the invention could be traced elsewhere. Whenever this can be done (except in the case of an invention imported from abroad, and acknowledged to be such), the patentee's right to his patent fails. It is so, as we have seen, although the real inventor should be in the service of the patentee; and, à fortiori, will it be so where there is still less connection between them. In Tennant's case, it was proved that, before the grant of the patent, conversations had taken place between Tennant (the patentee) and a chemist, who had suggested to Tennant the basis of the patented improve-This piece of evidence, in addition to slight evidence of user, induced the Court to nonsuit the plaintiff. (Dav. P. C. 429.)

PUBLICATION IN PRINTED BOOKS.

It has been repeatedly held that an inventor's claim to novelty is destroyed by showing the previous publication of the invention in some printed book in use in Great Britain, or in the specification of a previous

Mr. Justice Buller, in King v. Arkwright (1 W. P. C. 72), said:—"It is admitted that this is not a new discovery; for Emmerson's book was produced. which was printed a third time in the year 1773, and that is precisely the same as this." If, prior to his obtaining a patent, any part of that which is of the substance of the invention has been communicated to the public in the shape of a specification of any other patent, he cannot claim the benefit of his patent. (Lord Ellenborough in Huddart v. Grimshaw, 1 W. P. C. "Although" (said Tindal, C. J., in Cornish v. Keene, 1 W. P. C. 507) "it is proved that the invention is a new discovery, so far as the world is concerned, yet if anybody has been able to show that although that was new-that the party who got the patent was not the man whose ingenuity first discovered it, that he had borrowed it from A or B, or taken it from a book printed in England, and which was open to all the world—then it would become an important question whether he was the first and original inventor of it." In Jones v. Berger (1 W. P. C. 550), it had been alleged that the principle of the invention was not new, having been the subject of former patents, and contained in published books; whereupon Maule, J., remarked, "I think it is an objection to a patent, and not evidence simply of an objection, that there has been a previous patent and specification enrolled containing the invention. In the same way, I think it is an objection to a patent that it has been published in such a book." In the course of the argument of the case of The Househill Company v. Neilson (1 W. P. C. 673), an appeal from the Court of Session in Scotland to the House of Lords, Lyndhurst, L. C., asked, "If the machine is published in a book, distinctly and closely described, corresponding with the description in the specification of the patent, though it has never been actually worked, is not that an answer to the patent? It is continually the practice, on trials for patents, to read out of printed books, without reference to anything that has been done." And Lord Brougham added, "It negatives being the true and first inventor. It must not be a foreign book, but published in England." (1 W. P. C. 718.)

The law, however, has since been interpreted somewhat differently from what is laid down in this last sentence. If the foreign book, containing a description of an invention, has been circulated in England (Reg. v. Steiner, Newton's Lond. Jour. vol. 40, p. 71), or even if only four copies of the foreign book are sent over to a bookseller in this country, and by him exposed for sale, only one being actually sold to a public library (Lang v. Gisborne, 31 Beav. 133), a patent subsequently obtained by an independent inventor is invalid.

It seems from Heurteloup's Patent (1 W. P. C. 553) to have been thought that the deposit of a foreign work in the British Museum, which work contained the specification of a French patent for an invention, in great part the same as that for which a patent had subsequently been obtained in England, was sufficient to vitiate the latter patent on the ground of want of novelty.

However, where the book relied upon as evidence of a disclosure of the patentee's invention, a skate, before the date of his patent, was an American book containing a copy of a drawing of the skate attached to the patentee's American patent, and which book had been received by a librarian of the Patent Office Library in London about thirty-seven days before the date of the English patent without being entered either in the list of donations or in the catalogue of the library, and nothing more was known of it until another librarian found it many months afterwards on a shelf in a corridor leading to the public room, which corridor was open to

the public, all this was held by Jessel, M. R., and afterwards by the Court of Appeal, not to prove a publication sufficient to invalidate the patent. (Plimpton v. Spiller, L. R. 6 Ch. D. 412.)

It may be inferred from some of the preceding cases, that when the validity of a patent is contested on the ground of the invention having been previously in public use, or communicated to the world by a book, it is not necessary to show that the patentee derived his knowledge of the invention from such user, or book. And it was expressly decided, in Stead v. Williams (2 W. P. C. 142), that if the invention has been already made public by any description contained in a work, whether written or printed, which has been publicly circulated, in such case the patentee is not the first and true inventor within the meaning of the statute, whether he has himself borrowed his invention from such publication or not; because the public cannot be precluded from the right of using such information as they were already possessed of at the time the patent was granted. The application of this principle must depend upon the particular circumstances of each case. The existence of a single copy of the work, though printed, if brought from a depository where it has long been kept in a state of obscurity, would afford a very different inference from the production of an encylopædia or other work in general circulation. question will be, whether, upon the whole evidence, there has been such a publication as to make the description a part of the public stock of information. (See also Plimpton v. Malcolmson, L. R. 3. Ch. D. 531, and Plimpton v. Spiller, cited above.)

PUBLICATION IN THE SPECIFICATION UNDER A PRIOR PATENT.

The law as regards the publication of the invention in the specification under a prior patent, is precisely the same as that with reference to a publication in a printed book. The invention has been deprived of its requisite attribute of novelty if it has been described in a previous specification, whether the patent has or has not expired. But if the prior inventor has not shown how the invention is to be practically carried out, and an independent inventor does this and fully explains the mode in which the result is obtainable, his patent will be held good. It will be considered that he has been the first to carry the invention to a useful result, although his patent was granted after another one by which a similar object was sought to be In the case of Betts v. Menzies (10 H. L.C. effected. 117), it was held that a general description in a prior specification or in a published book, even if suggesting information or involving some speculative theory pertinent to the invention in question, is not to be considered as anticipating, and therefore avoiding for want of novelty, a subsequent patent involving a practical invention productive of beneficial results, unless it is ascertained that the antecedent publication involves the same amount of practical and useful in-Betts' patent was for the production of a formation. material capable of application to many useful purposes by combining plates of lead and tin by means of pressure. It appeared that as far back as 1804 one Dobbs had patented a process for making a new material by combining lead and tin by pressure, but he did not with any precision define the relative thicknesses of the plates of metal nor the degree of pressure to be applied, whereas Mr. Betts entered minutely into those Moreover, it was not shown that the earlier process had ever been carried into practice. these circumstances, the House of Lords held that Betts' invention had not been anticipated. See also the observations of Wood, V. C., in the subsequent case of Betts v. De Vitre (11 L. T. N. s. 445), in which the validity of the same patent was in question.

The antecedent description of an invention which will have the effect of depriving a subsequently patented invention of the attribute of novelty, must (according to Westbury, L. C., in Hills v. Evans, 4 De G. F. & J. 288), "be such that a person of ordinary knowledge of the subject would at once perceive, understand, and be able practically to apply the discovery, without the necessity of making further experiments and gaining further information, before the invention can be made useful. If something remains to be ascertained which is necessary for the useful application of the discovery, that affords sufficient room for another valid patent. . . . The information as to the alleged invention given by the prior publication must, for the purposes of practical utility, be equal to that given by the subsequent patent. invention must be shown to have been before made known. Whatever therefore is essential to the invention must be read out of the prior publication. specific details are necessary for the practical working and real utility of the alleged invention, they must be found substantially in the prior publication. Apparent generality, or a proposition not true to its full extent, will not prejudice a subsequent statement which is limited and accurate, and gives a specific rule of practical application. . . . Upon principle therefore I conclude that the prior knowledge of an invention to avoid a patent must be a knowledge equal to that required to be given by a patent, viz. such a knowledge as will enable the public to perceive the very discovery, and to carry the invention into practical use." And in the above-cited cases of Betts v. Menzies the same learned judge said (10 H. L. C. 152), "Even if there is identity of language in two specifications, and (remembering that those specifications describe external objects) even if the language is verbatim the same, yet if there are terms of art found in the one specification, and also terms of art found in the other specification, it is impossible to predicate of the two with certainty, that they describe the same identical external object, unless you ascertain that the terms of art used in the one have precisely the same signification, and denote the same external objects at the date of the one specification as they do at the date of the other."

Where a provisional specification contained an incomplete description of a piece of mechanism which was omitted from the complete specification, and another patent was afterwards obtained for similar mechanism, the passage in the preceding patent was held not to be a prior publication of the subsequent invention so as to vitiate the second patent, because the description was not sufficient to enable a workman to make the object. (Stoner v. Todd, L. R. 4 Ch. D. 58.)

The hardship of depriving a bona fide inventor of the benefit of his patent, by merely showing that some other individual had invented or used the invention before the date of the patent, seemed so great that the Legislature interposed, by the 2nd sect. of the 5th and 6th Will. IV. c. 83, of which we shall speak more fully in the chapter on the Confirmation of Letters Patent.

CHAPTER IV.

WHO MAY BE A PATENTEE.

THE reader has already been made acquainted with the fact, that the law requires the grantee of letters patent to be the true and first inventor of the thing in respect of which they were obtained; and we have discussed, in preceding pages, the question-Who is to be considered a true and first inventor? The strict letter of the statute has been so far relaxed as to allow persons simply importing an invention from a foreign country into this realm to obtain a patent in respect of it, provided that such an invention is new and useful, which words are to be interpreted in precisely the same way, whether it is imported from abroad, or whether it is discovered within the limits of the British empire. In other words, the administrators of the law always read the word "inventor," in the statute, as embracing an importer. decision on this point was in the case of Edgeberry v. Stephens, to be found in the second volume of Salkeld's Reports, p. 447, and is thus quaintly worded: "If the invention be new in England a patent may be granted, though the thing was practised beyond sea before; for the statute speaks of new manufactures within this realm; so that if it be new here, it is within the statute; for the act intended to encourage new devices useful to the kingdom, and whether learned by travel or by study, it is the same thing."

In Carpenter v. Smith (1 W. P. C. 535), Lord Abinger said, "A man has a right to a patent, not only for his own original patent, but he has a right to a

patent, if he is the first person who brings into England an invention which is used abroad and not known in England; if, therefore, any person was to import from America a machine, and have that machine used in England, and was to buy considerable quantities of them, no other person could take out a patent for that, because it is a machine used abroad, and a man might have a patent taken out for it, if he is the original inventor of it."

Whilst a patent taken out by a British subject for an invention communicated by a foreigner residing abroad is perfectly unobjectionable, there seems reason to doubt whether a patent taken out by a British subject, in respect of an invention derived from an alien permanently domiciled in Britain, would be held valid. It has been decided that an alien, subject of a country with which we are at amity, may well be the grantee of a patent privilege (Chappel v. Purday, 14 M. & W. 318), and that the grant may either be taken in his own name or in the name of another in trust for him. (Beard v. Egerton, 3 C. B. Rep. 97.) It has now become a very common practice to grant patents to British subjects resident in Great Britain in respect of inventions communicated from abroad. If the grantee is the agent of the foreign inventor, the letters patent are subsequently assigned to the latter or his nominee.

If a patentee has stated in his petition that he was the true and first inventor, when in reality the subject-matter was communicated to him by a British subject resident abroad, the patent is void. (Milligan v. Marsh, 2 Jur. N. s. 1083.) So also when an invention is partly original and partly communicated from abroad, it seems that the latter part should be distinguished in the specification. (Renard v. Levinstein, 10 L. T. N. s. 177.)

But a patent in respect of an invention communicated to one British subject by another when both reside in this country, would certainly be held invalid. Even when the patentee was the administratrix of her late husband the inventor, who had died before applying for a patent, her knowledge of the invention being obtained from his papers, the patent was held void. (Marsden v. Savile Street Foundry and Engineering Company, L. R. 3 Ex. D. 203.)

Persons occupying an official position may under certain circumstances be incapable of obtaining a patent for inventions connected with the subjectmatter of their official business. Thus, Patterson, one of the three gas referees appointed by the Board of Trade under the City of London Gas Act of 1868, procured a patent for an improved mode of purifying coal gas on the 9th of March, 1872. It was stated that he had obtained a knowledge of the patented process in the course of his labours as referee, and it appeared that the alleged invention had been described by the three referees, including Patterson, in an official report, which though dated the 31st of January, 1872, and printed about that time, was kept back from the authorities to whom it ought to have been presented as soon as printed, until the 26th of March. for an infringement of the patent having been decided in Patterson's favour, the case went before the Court In delivering judgment in favour of the of Appeal. defendants on the ground of previous public user, James, L. J., said, "Although it is not necessary for the determination of this suit to pronounce any final decision on this point, we deem it right to say that we think it, at the very least, very questionable whether it can be competent for a member of an official commission or committee to take out a patent for the subject-matter of their official investigation embodied in their official report to the public authorities, or to treat as piratical infringers those who have followed the suggestions and directions contained in such report." (Patterson v. Gas Light and Coke Company, L. R. 2 Ch. D. 812.) But in the House of Lords on appeal (L. R. 3 App. Cas. 239), the point thus treated as doubtful in the Court below was considered to be clear law, and it was held that the knowledge obtained in the discharge of his duty by one referee, and by him communicated to his colleagues, became at once public property, and could not be treated by them as confidential, nor could one of their number take out a patent for it.

When two contending applicants for a patent claim to be independent contemporaneous discoverers, the law-officer usually refuses to allow the grant to issue to either separately, but offers it to the two jointly. However, in a case where two persons were engaged in making experiments with regard to the propulsion of vessels, and something occurred which suggested an improvement to both, whereupon they communicated their ideas to each other, and at the end of two years one of them applied for a patent, which was opposed by the other; it was held by Lord Cranworth, C., that the first applicant could not be prevented by the other from obtaining a patent, although there was no doubt that it might be repealed by scire facias. (Lowe's Patent, 25 L. J. Ch. 454.)

Where it appeared that a master and his foreman had severally invented certain improvements for which the former applied for a patent, the grant being opposed by the foreman, it was held that the patent should only issue upon the master undertaking to hold the same as trustee for both. (Re Russell's Patent, 2 De G. & J. 130.) In the same case it was said that where a matter is in much doubt, the Court, rather

than withhold the Great Seal from a patent, will run the risk of putting the party opposing to the costs of ulterior proceedings, since the one course might cause an irremediable injury, the other a remediable one. See also Re Spence's Patent (3 De G. & J. 523), where Lord Chelmsford, C., said he would not refuse to seal a patent unless it could be shown that it would certainly be bad. And see Re Tolson's Patent (6 De G. M. & G. 422). But letters patent will not be sealed when a patent has been previously granted for the same invention, and there is no fraud, although the validity of the sealed patent is disputed. (Manceaux's Patent, L. R. 6 Ch. 272.)

Where a patent is granted to two or more persons, each may work the invention for his own benefit without being liable to account to the others. (Mathers v. Green, 1 L. R. Ch. 29.)

The 21st section of the Patent Law Amendment Act, 1852, provides that where the applicant for letters patent dies during the continuance of the provisional protection, or the protection by reason of the deposit of a complete specification, as the case may be, such letters patent may be granted to the executors or administrators of such applicant at any time within three months after his death, whether the time of provisional protection has expired or not; and the executors or administrators of a patentee who did not file a complete specification along with his petition, and died before the filing of the specification required by the letters patent, are permitted to file a specification under the clause usually contained in letters patent which embraces the inventor's executors and administrators.

This section does not apply by its very terms to the case of an administrator whose knowledge of the invention was derived from the papers left behind by the inventor, who had died before applying for a patent; and a patent obtained by an administrator under such circumstances is void. (Marsden v. Savile Street Foundry and Engineering Company, L. R. 3 Ex. D. 203.)

CHAPTER V.

THE TITLE.

When an inventor prepares his petition to the Crown, praying for a grant of letters patent, he describes, in general terms, the nature of his invention; and this description, being transferred into the letters patent, is called the Title of the patent.

It is of great importance that the inventor should rightly frame his title, as many patents have been lost by inattention in this particular. Though the rules of the Commissioners of Patents require that the title should point out distinctly and specifically the nature and object of the invention, it is advisable to disclose the invention in as general terms as may be allowed. for two reasons: First, lest other persons who were about to specify should obtain a clue to it, and frame their specification so as to deprive the real inventor of the priority and the reward which are his right. Secondly, that the title may not disclose to any rival inventor, or manufacturer, information which may be used to the prejudice of the inventor, should his application for the patent be opposed. Instances of the nature referred to are not, it is true, of common occurrence; but they have occurred, and it is most desirable that an inventor should be cautious as to the language he uses. If the title is too general,—that is to say, if it extends to matters not included by the invention,—the patent is bad; and if, on the other hand, it is too narrow, it excludes, by its very terms, something of which the inventor had a right to secure the monopoly.

The inventor must carefully avoid the use of language which will lay his title open to the charges of being "too large, uncertain, inapplicable, inexplicable, inconsistent, vague, ambiguous, and at variance with the specification"—charges which it appears from a reported case were once heaped upon an unfortunate title relating to the simple matter of paving with wood. If the title bears evidence upon its face of an intention to deceive the public as to the subject-matter of the invention, this is a point which may be urged before a jury with fatal effect, for their opinion may be taken as to the existence of such an intention. (Cook v. Pearce, 8 Q. B. 1044.)

To show the importance of framing an accurate title, we will cite a few instances where patents were vitiated by a blunder at the very beginning.

The title of the invention spoke of a tapering brush; the specification disclosed the invention of a brush, in which the bristles were of an unequal length, but there was no tapering to a point. The patent was held bad. (Rex v. Metcalf, 2 Stark. R. 249.)

The title was "certain improvements in the flageolet whereby the fingering will be rendered more easy, and notes produced that were never before produced." It appeared that only one new note was produced by the improved instrument, and this was held to be a fatal objection. (Bainbridge v. Wigley, Parl. Rep. 197.)

The title was, "A new and improved method of drying and preparing malt;" but the invention specified was a process of producing a colouring matter for beer, by submitting malt, prepared in the ordinary manner, to a high temperature. This patent was likewise held bad. (Rex v. Wheeler, 2 B. & Ald. 345.)

A patent was obtained for an improved method of lighting cities, towns, and villages; but it appeared that the invention consisted in the improvement of an old street-lamp. The title was held too general in its terms, and the patent could not be supported. (Cochrane v. Smethurst, 1 Stark. 205.)

Another patent held bad, by reason of having too general a title, was that contested in the case of Campion v. Benyon (1 Carp. Rep. 418). The patent was for "a new and improved method of making double canvas and sailcloth with hemp and flax, or either of them, without any starch whatever;" but it appeared that double sailcloth had been made without starch before the patent, and the invention proved really to be a new method of preparing hemp and flax, with a view to its being woven into canvas and sailcloth.

The title of Felton's patent described the invention as a machine for giving an edge to knives, razors, scissors, and other cutting instruments; but the invention appeared, from the specification, not to be applicable to scissors, and the patent was adjudged to be void. (Felton v. Greaves, 3 C. & P. 611.)

In Newall v. Elliott (10 Jur. N. s. 955; S. C. 13 W. R. 11), Pollock, C. B., stated he had, when Attorney-General, refused an application for a patent for "An improvement in locomotion," such a title being too general.

On the other hand, the titles in the following cases were held sufficiently certain:—"Improvements in the manufacture of plated articles," when there was only a single improvement (Nickels v. Haslam, 8 Scott, N. R. 97). "A new or improved method of obtaining the reproduction of all the images received in the focus of the camera obscura," leaving it a matter of doubt whether the method was altogether a new one, or only an improvement (Beard v. Egerton, 3 C. B. 97). A process for more distinctly showing the finer lines of an engraving by means of a glazed surface on the paper designed to receive the impression, was held sufficiently described by the words, "Certain improvements in copper and other plate-printing" (Sturtz v.

De La Rue, 5 Russ. 322). Title, "Improvements in Carriages:" the specification described improvements in adapting German shutters to carriages. such shutters can only be applied to covered carriages. and the title spoke generally of carriages, it was contended that it was too large. After argument, it was held a sufficiently accurate title; Tindal, C. J., observing that it would endanger the validity of very many patents which have hitherto been free from exception, if the mere fact that their titles were given in such terms as to be capable of comprising other inventions besides that contained in the specification were sufficient to avoid them, in the absence of any proof of intention to commit a fraud on the Crown, or to deceive or mislead the public. (Cook v. Pearce, 8 Q. B. 1044.)

A patent was obtained for "improvements in machinery for the manufacture of bobbin net lace." It was objected that the invention really was only for making a spot during a particular part of the process, and was useless where that addition was not wanted. The Court, however, overruled the objection. (Fisher v. Dewick, 1 W. P. C. 264.)

The title of a patent was for "Certain Improvements in the Doors and Sashes of Carriages." The patentee, in his specification, said, "I have shown my invention as applied to railway carriage-doors and windows, although they are equally applicable to the doors and windows of any other description of carriage or in any position where doors and windows are subject to jar and vibration." This was held not to extend his claim beyond the title (Oxley v. Holden, 8 C. B. N. s. 707). See also Newall v. Elliott (10 Jur. N. s. 954).

The title and specification must be read together; and if the former should be ambiguous, the latter may explain it. Thus the title of Neilson's patent was an invention "for the improved application of air to produce heat in furnaces where bellows or other blowing apparatus are required." The invention disclosed by the specification was the introduction into the furnace of air heated between the blowing-apparatus and the furnace; and it was held that this answered sufficiently well to the title (Neilson v. Harford, 1 W. P. C. 312, 373). The title must not represent the patentee to be the inventor of one thing, and the specification show him to be the inventor of another. A specification will not be allowed to comprise more than can be fairly found in the letters patent, and a claim in the specification of something not included in the grant renders the patent void. Thus, in Croll v. Edge (9 Scott, C. B. R. 479), the patent was granted for "certain improvements in the manufacture of gas, and in the apparatus used when transmitting and measuring gas." The specification contained a claim of an improved mode of making retorts; but as the claim fell neither under the head of manufacture of gas, nor apparatus used in transmitting or measuring gas, the patent was declared void.

CHAPTER VI.

THE PROVISIONAL SPECIFICATION.

THE sixth section of the Patent Law Amendment Act. 1852, enacts, that every petition for the grant of letters patent for an invention shall be left at the office of the Commissioners, accompanied by a statement in writing, called the Provisional Specification, signed by, or on behalf of, the applicant for letters patent, describing the nature of the invention. The rules issued under that Act require that the provisional specification shall state distinctly and intelligibly the whole nature of the invention, so that the law officer may be apprised of the improvement, and of the means by which it is to be carried into effect. But a general description of the invention fairly showing its real nature is sufficient. Minute details as to the manner of carrying out the invention need not be given (Re Newall and Elliott, 4 C. B. N. s. 269). The applicant is not bound to illustrate the provisional specification with drawings, though this is occasionally done.

Under sections seven and eight of the Patent Law Amendment Act, 1852, every petition for letters patent is referred to one of the law officers for approval; and it is the duty of the law officer to examine the title and the provisional specification, and to certify that they are correct and in proper form. In case either should be too large or insufficient, he has power to allow or require them to be amended. It may be considered that, when these documents have passed this ordeal, and a certificate of the law officer's approval of them

has been given, no further question can arise upon their sufficiency. But from the results of the actual working of the law, we consider it highly desirable that an inventor should not place too great reliance upon this, but should adopt every means in his power to make both the title and the provisional specification perfectly correct, and in accordance with both the letter and the spirit of the law, that they may, if at any time disputed, be held good upon their own merits.

The object of the provisional specification is both to protect the invention from the time a patent is applied for until the complete specification is filed, and to provide against the introduction into the complete specification of any matters of invention differing from those for which the letters patent were granted. The patentee is not to be prevented including in his complete specification those improvements in practical details which may occur in testing and carrying out the invention, provided that those improvements require the use of the original matter of invention set forth in the provisional specification.

A provisional specification (said Jessel, M. R., in Stoner v. Todd, L. R. 4 Ch. D. 58) was not intended to contain a complete description of the thing so as to enable any workman of ordinary skill to make it, but only to disclose the invention, fairly, no doubt, but in its rough state, until the inventor could perfect its details.

"The office of the provisional specification" (said Lord Chelmsford in Penn v. Bibby, L. R. 2 Ch. 127) "is to describe the nature of the invention, not with minute particularity, but with sufficient precision and accuracy to inform the law officer what is to be the subject matter of the patent. It is not at all necessary that the provisional specification should describe the mode or modes in which the invention is to be worked or car-

ried out. . . . The filing of the provisional specification protects the invention for six months and gives the patentee during this period the like powers, rights, and privileges as might have been conferred upon him by letters patent. The object of this protection evidently is to enable the patentee to perfect his invention by experiments which, although open and known, will not be a user and publication to the prejudice of letters patent to be afterwards granted, so that he may be in a condition to describe in his complete specification, as the result of his experience, the best manner of performing the invention. It clearly appears, therefore, that the complete specification is in a sense supplemental to the provisional specification, not going bevond nor varying from it as to the nature of the invention, but conveying additional information which may have been acquired during the currency of the provisional specification as to the manner in which the invention is to be performed."

The provisional specification is not intended to ascertain the entirety but the identity of the invention, said Pollock, C. B., in Newall v. Elliott, 1 H. & C. 797. And see also Foxwell v. Bostock, 4 De G. J. & S. 298. But these cases ought to be considered with reference to the later cases of Penn v. Bibby (cited above) and Bailey v. Roberton (cited p. 107), which show that if the claims of the complete specification are not comprehended within the terms of the provisional specification, the patent will be invalid.

In the case of Ex parte Bates and Redgate (L. R. 4 Ch. 577), Lord Hatherley, C., said that a person by lodging a provisional specification under sect. 6 of the Patent Law Amendment Act, 1852, "obtains no rights against the public (under sect. 8 of the same Act) until his patent has been sealed, and even then the patent will not relate back to acts done in the

interval. He is only protected against the consequences of his own publication, and thus may employ workmen and obtain machinery without the risk of being betrayed. But that is all, and he has no right or privilege against any other person. If he wishes to have more, he may, under sect. 9, file a complete specification, and then he is absolutely protected for six months, and has a right to proceed as if he had a patent for that period. The publication of the complete specification gives to the world the whole benefit of the invention, and then the invention will be protected against any other person obtaining a patent for the same invention."

It sometimes happens that after a provisional specification has been lodged, an inventor thinks it desirable to abandon it and lodge another in a different It has been doubted whether a patent obtained upon the latter provisional specification is valid, but in the case of Oxley v. Holden (8 C. B. N. s. 666), it was held that a provisional specification does not become public by the mere fact of abandonment. It does not become public until published by the Patent Office, under the authority of the 2nd sect. of the 16 and 17 Vict. cap. 115. Furthermore, though the first provisional specification may afford an objection at the office to the receiving of the second, or to the granting of a patent for the invention after the first specification has expired, yet there is no principle of law and no enactment making a patent void if so granted.

A prior provisional specification ought not, in the absence of fraud, to stand in the way of the law officer allowing another inventor to file a second provisional specification for the same invention. (Ex parte Bates and Redgate, L. R. 4 Ch. 580.)

CHAPTER VII.

THE COMPLETE SPECIFICATION.

By the ninth section of the Patent Law Amendment Act, 1852, it is enacted, that the applicant, instead of leaving with the petition a provisional specification, may, if he think fit, file with it an instrument in writing, under his hand and seal, to be called a Complete Specification, particularly describing and ascertaining the nature of the invention, and in what manner the same is to be performed.

It must be remarked that under the thirteenth section of the same act, the law officer may object to the form of the complete specification, if left at the patent office along with the petition and declaration, and he may order the language to be altered before the patent is sealed. A complete specification filed after the sealing of the patent is not submitted to any examination of this kind.

It appears that an applicant for a patent does not, by lodging a complete specification under the ninth section of the statute as above mentioned, acquire the rights of a patentee so as, during the six months' protection, to prevent the grant of a patent to another person who had previously obtained provisional protection. (Re Henry's and Farquharson's Applications, L. R. 8 Ch. 167.)

If a provisional specification only shall have been left with the petition, the letters patent contain a clause making them void, in case the patentee shall not describe and ascertain the nature of the invention, and the manner in which the same is to be performed, by an instrument in writing under his hand and seal, and cause the same to be filed within six calendar months next after the date of the letters patent. This is the usual Complete Specification. But if a complete specification shall have been filed along with the petition, under the ninth section of the Patent Law Amendment Act, 1852, then in place of this clause another is substituted, making the letters patent void, in case such complete specification does not particularly describe and ascertain the nature of the invention, and in what manner the same is to be performed.

The Crown has power, under the sixteenth section of the Patent Law Amendment Act, 1852, to direct any complete specification, which may have been filed previous to the sealing of a patent, to be cancelled, whereupon the protection obtained by the filing of such complete specification will cease. The Lord Chancellor has power, under the sixth section of 16 and 17 Vict. c. 115, to extend the time for filing the complete specification by one month when, through accident, and not through wilful neglect or default, the specification has not been filed within the limited time.

In the case of there being a clerical error in the filed engrossment of a specification, it may be amended by the order of the Master of the Rolls. (Johnson's Patent, L. R. 5 Ch. D. 503, and the cases there cited.)

In the matter of Pullan's Patent (May, 1878), leave was given by the Lord Chancellor upon an ex-parte application to correct a filed specification by the addition of drawings alleged to have been omitted through inadvertence. The drawings so added were not described in the specification. Some months after the addition was effected an application was made to the Lord Chancellor by a patentee who had been threatened with an action for infringing the amended patent to re-hear the original application. The Lord Chancellor

decided to hear the matter afresh, and upon reading the affidavits filed on both sides, and considering that his order had been made on imperfect information, ordered the added drawings to be struck out of the specification with costs.

It must be understood that in our subsequent remarks we refer only to the complete specification, or to the specification filed subsequent to the grant of the patent, and not to the provisional specification.

It has generally been considered that letters patent are founded upon an implied compact between an inventor and the public.1 The latter, through the Crown, secures to the former the monopoly of the invention, with all the advantages flowing therefrom, for a given period of time; and the inventor, on his part, undertakes to tell the community what his invention really is, and to teach them how it may be practised and carried into effect when the monopoly shall have It is by this instrument that the public is made acquainted with the inventor's secret, and he is bound, in return for the privilege granted to him, to describe it clearly and fully, with the view of enabling others, when the proper time comes, to work the invention, if they desire to do so. In the meantime. the public are entitled to know what it is they are

¹ The existence of this implied compact has, however, been denied by high judicial authority. In the case of Frather v. The Queen. 6 B. & S. 257, where the Court of Queen's Bench decided that Letters Patent granted no exclusive right as against the Crown, Cockburn, C. J., in delivering the judgment of the Court, said: "It appears to us that the assumption of a contract between the Crown and the patentee is altogether fallacious. The grant of the patent is a simple exercise of the prerogative, in which—the ground on which alone the grant of a monopoly is justifiable being that the invention shall be made available to the public—the Crown annexes as a condition of the grant that the true nature of the invention and the manner in which it can be used shall be fully and unreservedly disclosed."

prohibited from using, that they may not unawares incur liability.

In describing his invention, a patentee may, if he think proper, make use of plans and diagrams to be annexed to the specification; and those who are called upon to interpret the instrument must look both at the words and the drawings, with the view of making them explain each other, and of arriving at the patentee's meaning (Abbott, C. J., in Bloxam v. Elsee, 1 C. & P. 564). Many inventions can be explained perfectly well without any drawings; but wherever machines are the subject of, or connected with, the invention, drawings should always accompany the specification, for in such a case the visual representation of the parts will be clear at once, when a verbal description would be utterly unintelligible. Care must be taken that the patentee does not bind himself to the particular form given in the drawing, when he does not so intend. It may be that only a particular form is required to be secured, because no other form will effect the proposed result. In such a case, if the form is not copied, the invention is not made use of. in most cases it is more than one form which is sought to be protected by patent, and the form given in the drawing is only to be taken as an illustration. fact ought to be distinctly shown in the specification.

In Arnold v. Bradbury (L. R. 6 Ch. 706) it was contended by the defendants in a suit for restraining the infringement of a patent for an improved ruffle and the machinery for making the same, that the patentee had not described the mode in which the ruffle was made; but Lord Hatherley, L. C., held that as the machine was very simple, and as the drawing showed how it was worked, that was sufficient. (See also Hastings v. Brown, 1 E. & B. 454; Morton v. Middle-

ton, 1 Cr. S. 3rd Ser. 722; Daw v. Eley, L. R. 3 Eq. 500 n; 14 W. R. 126.)

It seems that a patentee will not be allowed, in an action brought by him for an infringement, to refer to a drawing as descriptive of a material part of the invention not described in the letterpress of the specification (Clark v. Adie, L. R. 10 Ch. 667; affirmed on appeal, L. R. 2 App. Cas. 315; Macfarlane v. Price, 1 Stark. 199, 1 W. P. C. 74 n); nor to read the provisional specification, with a view to aid, or supply a defect in the complete specification. (Mackelcan v. Rennie, 13 C. B. N. s. 52.)

It has been already stated that the provisional specification need not contain all the details by which the invention is proposed to be carried into effect: it is sufficient if a broad outline of the invention is there sketched, so that its whole nature is ascertainable. On the other hand, it is permissible for a patentee to let drop some of the details and minor features of the provisional specification when he comes to prepare his complete specification, provided there is no fraud; that the essential features of the invention are preserved; and that the patentee does not thereby alter its main character and chief objects. (Thomas v. Welch, L. R. 1 C. P. 192; Penn v. Bibby, L. R. 2 Ch. 134; Stoner v. Todd, L. R. 4 Ch. 58.)

Although some of the minor details contained in the provisional specification may be omitted from the complete specification without endangering the validity of the patent, so long as the essential features of the invention remain untouched; and although the invention set forth in the earlier document may be expanded and developed when the complete instrument comes to be prepared, in accordance with the fuller knowledge which the inventor may then possess, yet he must carefully keep within the lines originally laid down, and must sedulously avoid introducing into the complete specification anything which can be construed as a larger or different invention. substantial variance from the invention for which he originally sought protection will not be permitted. Thus, where the provisional specification set forth an invention for preserving animal substances in a fresh state for some time, which consisted in the application of a definite mixture of an aqueous solution of gelatine with an aqueous solution of bisulphite of lime, and the complete specification claimed in addition the use for the same purpose of an aqueous solution of the bisulphite of lime alone, this was held to be a distinct matter not covered by the provisional specification. It was an invention "larger than and different from that disclosed in the provisional specification," and the patent was therefore invalid (Bailey v. Roberton, L. R. 3 App. Ca. 1055), affirming the decision of the Court of Session in Scotland.

Formerly there was a disposition in the Courts to take part against patentees, under the impression that monopolies were not to be encouraged (attaching the old odious sense of the term to the phrase indicating a patent privilege for an invention); but of late years specifications have been liberally construed, with a disposition to read them fairly, so often as the patentee himself acts in a fair way towards the public, which he undertakes to instruct. (Huddart v. Grimshaw, 1 W. P. C. 85; Elliot v. Aston, 1 W. P. C. 222.) "A specification" (said Pollock, C. B., in Sellers v. Dickinson, 5 Ex. Rep. 324) "is to be read with candour and indulgence." "In construing a patent, a fair and liberal construction ought to be put upon it, and we must look to what the real intention of the inventor was," said Parke, B., in Palmer v. Wagstaffe, 9 Ex. Rep. In the case of Newton v. Halbard (Hil. Term,

1872), Mr. Justice Grove said, "A specification should not be construed in a technical or captious spirit, but with a fair intention to give it effect if it be reasonably intelligible." In the case of Harrison v. The Anderston Foundry Co. (L. R. 1 App. Ca. 574), Lord Chelmsford said: "In the construction of a specification it appears to me that it ought not to be subjected to what has been called a benign interpretation, or to a strict one. The language should be construed according to its ordinary meaning, the understanding of technical words being, of course, confined to those who are conversant with the subject matter of the invention." "I am anxious" (said Jessel, M. R., in Hinks v. Safety Lighting Company, L. R. 4 Ch. D. 607), "as I believe every judge is who knows anything of patent law, to support honest bona fide inventors who have actually invented something novel and useful, and to prevent their patents from being overturned on mere technical objections or on mere cavillings with the language of the specification, so as to deprive the inventor of the benefit of his invention. This is sometimes called a 'benevolent' mode of construction. Perhaps that is not the best term to use, but it may be described as construing a specification fairly, with a judicial anxiety to support a really useful invention, if it can be supported on a reasonable construction of the patent." (See also the remarks of the same learned judge, and of Brett, L. J., in Plimpton v. Spiller, L. R. 6 Ch. D. 412.) In Dudgeon v. Thomson (L. R. 3 App. Ca. 53), Lord Blackburn said: "I apprehend the duty of the Court is fairly and truly to construe the specification, neither favouring the one side nor the other; neither putting an unfair gloss or construction upon the specification for the purpose of saving a patent nor in order to extend it."

The construction of a specification belongs to the

Court alone, as soon as the attendant circumstances and the true meaning of the technical phrases, if there be any, have been ascertained by the jury (Neilson v. Harford, 1 W. P. C. 370; Bovill v. Pimm, 11 Exch. "Where novelty or infringement" (said Rep. 718). Lord Campbell, in Seed v. Higgins, 8 H. L. C. 561) "depends merely on the construction of the specification, it is a pure question of law for the judge; but where the consideration arises how far one machine imitates or resembles another in that which is the alleged invention, it generally becomes a mixed question of law and fact which must be left to the jury." It is also for the Court to decide the question as to the identity of inventions described in two nearly contemporaneous specifications, when such questions can be determined by a simple comparison of the specifications. (Per Coltman, J., in Allan v. Rawson, 1 C. B. 571; per Pollock, C. B., in Tetley v. Easton, at Nisi Prius, Macr. P. C. 68; and per Erle, J., in Bush v. Fox, Macr. P. C. 168; Booth v. Kennard, 2 Hurlst. & Norm. 84; Thomas v. Foxwell, 6 Jur. N. s. 271; Hills v. London Gas Light Company, 5 Hurlst. & Norm. See, however, the observations of Tindal, C. J., in Muntz v. Foster, 2 W. P. C. 105.) But if anything more than simple comparison is required to determine the identity or dissimilarity of two inventions, the question must be submitted to the decision of the jury.

"We by no means lay down as a general rule" (said Lord Campbell, C. J., in Thomas v. Foxwell, 5 Jur. N. S. 37), "that upon a question of novelty of invention such as this, raised by the comparison of two specifications, it must necessarily be a question of law for the Court. The specifications may contain expressions of art and commerce upon which experts must be examined, and there may be conflicting evidence, raising a question of evidence to be determined by the jury.

But it is quite clear that there may be cases in which the Court would be bound to decide the question of novelty exclusively, for the two specifications might be, in ipsissimis verbis, the same; and if they be in such plain and common language that the judge is sure he understands their meaning, he is bound to construe them as he does other written documents." "If there be two specifications to be compared" (said Lord Westbury, C., in Hills v. Evans, 4 De G. F. & J. 288-298), "in order to arrive at a conclusion of fact, the right of drawing the inference of fact from the comparison belongs to the jury, and is a question of fact, and not a question of law."

Steiner obtained letters patent for a new manufacture of a certain colouring-matter called garancine, extracted from madder-root, and extensively used in dyeing. This colouring-matter was formerly extracted by simply boiling in water, and the refuse matter, termed "spent madder," was thrown aside as useless, although it was known still to contain a considerable quantity of colouring-matter which boiling would not Various plans had been suggested for extracting the remainder of the garancine, previous to the date of Steiner's first patent, in 1832. cess was the employment of diluted sulphuric acid of a given strength, and he proposed to apply it to the extraction of the colouring-matter from both fresh and spent madder. So weak a solution of sulphuric acid had, however, little effect upon the spent madder: and in 1843 Steiner took out another patent, the one contested on this occasion. A much stronger solution of sulphuric acid was now used, and heat was employed. The process was specially applicable to the extraction of garancine from spent madder, and he thus obtained a large portion of the garancine which had previously remained attached to the woody fibre. Pollock, C. B.,

at the trial of an action brought for an infringement of the latter patent (Steiner v. Heald, 2 Car. & Kir. 1033), thought that the process was substantially the same as that described in the specification under the first "It appears to me that this is precisely the same as if you applied a process to grapes already imperfectly squeezed, by which you squeeze a little more juice out of them than was formerly done." Believing the invention to be destitute of novelty, he directed the jury that, in point of law, the alleged invention (viz. the one under the second patent) was not any manner of manufacture for which letters patent could The jury gave their verdict in be lawfully granted. favour of the defendant, in conformity with the judge's direction; but a rule to set the verdict aside, and for a new trial, on the ground of misdirection, was made absolute by the Court of Exchequer. The judge, it will have been observed, treated the conclusion to be drawn from the evidence as matter of law: whereas he ought to have left it to the jury to say, whether fresh and spent madder had different properties, chemical or otherwise, or whether they were the same thing, with the difference only that part of the colouringmatter had been already extracted. If the properties of the two substances were different, the invention was a new manufacture; but if the two things were the same, except that one was more charged with colouringmatter than the other, in that case the invention claimed would simply have been the application of a process already known, producing a known result. The object to which the process was applied not being different from that to which it had been formerly applied, in which case there would have been no new invention, it was for the jury to say, upon the evidence, whether the invention was a new manufacture or not. (Steiner v. Heald, 6 Exch. Rep. 607.)

The most important case decided of late years with reference to the interpretation of specifications is that of Betts v. Menzies, in the House of Lords (10 H. L. C. 117), in which it was held that even where there is an identity of language in two specifications, if such identity consist merely in technical terms, it must be considered impossible for the judge to predicate what exact meaning the first patentee attributed to such terms, if any long interval of time, such as the interval from 1804 to 1848, elapsed between the two specifica-Under these circumstances the judge ought not to undertake upon himself to decide as to the identity of the inventions, guided only by the similarity of language. He cannot assume that the inventions are substantially the same because the expressions employed are similar. The identity or dissimilarity is a fact which the jury must be called on to decide from the evidence laid before them. And in a subsequent case on the same patent, Wood, V. C., appears to have considered that it is no ground of proof of the effect of an anterior patent that scientific persons of the present day, with all the superior knowledge and intelligence obtained by the advance of science, can depose that they could produce the same results by the process disclosed by the anterior patent, as that designated by the subsequent one. (Betts v. De Vitre, 11 L. T. n. s. 445.)

It is the duty of the judge at the trial where a specification comes into question, to explain to the jury what that instrument directs to be done, and it is for the jury to say, whether, upon the evidence, the promised result will be accomplished by pursuing those directions. (Per Cresswell, J., in Beard v. Egerton, 8 C. B. 165; 19 L. J. C. P. 36.)

The first thing that a patentee about to specify should bear in mind is, that he is bound to act with

good faith. There must be no studied ambiguity or equivocal language; no attempt to keep anything secret; he must make a full disclosure of his invention; and his whole specification must be fair, open, explicit, and honest. If he acts in any other manner, it will bear hardly with him when his specification comes to be examined in a court of justice.

The next point to be attended to is the accurate definition of the invention, so that the reader may clearly understand in what it consists, and how it may be distinguished from what is old or what is another man's invention. In the case of Macfarlane v. Price (1 Stark. 199; 1 W. P. C. 74), Lord Ellenborough said that the patentee in his specification ought to inform the persons who consult it what is new and what is old. "He should say. My improvement consists in this: describing it by words if he can, if not by reference to figures. But here the improvement is neither described in words nor by figures; and it would not be in the art of man, unless he were previously acquainted with the construction of the instrument, to say what was new and what was old. A person ought to be warned by the specification against the use of the particular invention, but it would exceed the wit of man to discover from what he is warned in a case like this." "Every party" (said Cresswell, J., in Gibson v. Brand, 1 W. P. C. 640) "is bound to tell the public clearly by his specification what he claims, and what they may do or not do without risk of an action for infringing his patent." As to the cases in which it is necessary to distinguish the new parts of a machine or apparatus described in the specification from the old parts, the reader is referred to the section on Combinations in this chapter. It seems that when the invention is partly original and partly communicated from abroad, the latter part should be defined in the patent and

specification. (Renard v. Levinstein, 10 L. T. N. S. 177.)

The patentee should take care not to claim more in his specification than he is strictly entitled to, since a failure in part (provided that part is a material part) is a failure altogether, and that to which he has a just right will fall along with that which does not belong to him. To use Lord Eldon's illustration—if there be a patent both for a machine and for an improvement in the use of it, and it cannot be supported for the machine, although it might for the improvement merely, it is good for nothing, on account of its attempting to cover too much. (Hill v. Thompson, 1 W. P. C. 247.)

Therefore, if an inventor lays claim to a principle in addition to a new method of carrying it into effect, and it should turn out that the principle was known and had been previously acted upon for a similar purpose, in such case the patent cannot stand.

In the specification under the patent which formed the ground of dispute in Hill v. Thompson (1 W. P. C. 239), the patentee claimed not only the use of a particular quantity of lime in smelting iron, but the discovery of the usefulness of lime in that process It appeared, however, that lime had been previously used for the purpose, and the patent was accordingly held bad, although, if the patentee had restricted his claim to the particular proportions of lime and metal, it might have been sustained. Again, the specification under Minter's patent, for an improvement in the construction of chairs, was faulty for a similar reason; its claim was too extensive. provement consisted in applying a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the pressure against the back. It was proved that one Brown had previously invented a chair on the same principle, but his application of it was encumbered with additional machinery. If Minter had restricted his claim to the particular mode in which he effected the thing, his patent would have been valid; but since the specification went generally to the application of a self-adjusting leverage to the given purpose, it claimed more than he was entitled to; and if the patent had been held good, Brown could not have continued to make his chair without infringing it. (Minter v. Mower, 1 W. P. C. 138.)

Under a patent for improvements in stoves the specification claimed the construction of stoves made in such a manner that the fuel should be introduced from beneath. Now it was shown at the trial of an action of scire facias that grates had been previously constructed on this principle; and although the particular method of effecting the object was new, yet Lord Ellenborough held that as the patentee had claimed the principle, which was not new, the patent was bad. Here it is clear that if the inventor had limited his claim to his own mode of carrying the principle into effect his patent would have been upheld. (Rex v. Cutler, 1 Stark. 354, 1 W. P. C. 76.)

The case of The King v. Elsec (1 W. P. C. 76) affords another instance of the same error. The specification claimed in effect the exclusive right of combining silk and cotton thread, and then of making lace of the combined material. It was proved that silk and cotton thread had previously been combined in some mode or other; and although the material so constructed was unfit for making lace on account of its coarseness, yet as the patentee did not confine himself to any particular mode of combining the two, his claim was held to extend to every mode, and was therefore bad.

Fisher and Gibbons obtained a patent in 1844 for an invention of a machine in which a shuttle was combined with a needle for producing stitches to ornament In 1846 Thomas procured a patent for improvements in machinery for sewing and stitching His specification was construed as various fabrics. claiming generally the use of needles in combination with shuttles for producing stitches, and although he showed one particular form of a needle and shuttle machine which was a different combination from that described by Fisher and Gibbons, it was held that, having regard to the language employed, his claim could not be confined to that particular combination. His patent was, therefore, invalid in consequence of the patentee claiming too much. (Thomas v. Foxwell, 5 Jur. n. s. 37; 6 Jur. n. s. 271.)

Ralston's patent was for embossing and finishing woven fabrics, and for the machinery employed therein. His specification described the invention as consisting of the use of a metal or wood roller, engraved with any required design, in combination with a bowl, that is a smooth paper roller, the two being driven at different By moving the fabric transversely rates of speed. when fed up to the machine, a great variety of watered patterns might be given. The object of the invention was stated to be the production of an indefinite variety of patterns, as well as a bright finish or lustre. patent failed to stand the ordeal of an examination in the courts of law, on account of the patentee having It was proved that the use of a claimed too much. patterned roller, in combination with a bowl moving at the same speed was not new in the operation of embossing fabrics, and that the use of a plain roller and bowl moving at different rates of speed was well known in the operation of finishing or calendering fabrics. It was therefore held that the patentee's combination, as stated in the specification, was not a patentable invention. Had he restricted his claim to the use of a patterned roller with *circular* grooves (which alone produced the watered effect) in combination with a bowl, the two moving at different rates of speed, for a specific purpose, viz. the double operation of finishing the fabric and producing a watered effect by one process, there is ground for supposing that he might have retained his patent. (Ralston v. Smith, 9 C. B. N. s. 117; 11 C. B. N. s. 471; 11 H. L. Ca. 223.) We may refer to the cases of Saunders v. Aston (13 B. & Ad. 886; 1 W. P. C. 75 n.) and Haworth v. Hardcastle (1 W. C. P. 484), as further illustrations of this point.

But, on the other hand, a specification is not invalid by reason of its describing an invention, part of which was not new at the date of the patent if, after eliminating what was old, a residue is left of sufficient utility, in which case the residue, if properly claimed, will be a proper subject for letters patent (Frearson v. Loe, L. R. 9 Ch. D. 48). In this case, Jessel, M. R., said, "It does not follow that because an inventor thinks he has invented more than he has in fact, and describes the advantages of his invention, and some of these advantages arise from an old portion of the invention, it may not still be a good patent, provided that the invention as claimed is so limited as to fail to cover the actual thing in use, while it covers some of the advantages mentioned; in such a case it may still. no doubt, be a good patent."

A patentee will not be allowed to make wide anticipatory or speculative claims, nor will his patent be permitted to cover matters of which he was ignorant at the date of his patent. In the specification under a patent for improvements in machinery for raising water, the patentee said, "If any gases or elastic media other than atmospheric air are used, with which to charge the

case [part of the machinery], I claim the sole right to do so." Pollock, C. B., who tried an action brought for infringing this patent (Tetley v. Easton, Macr. P. C. 48) remarked upon this passage, that he had no hesitation in saying that, in point of law, the patentee had no right to make such a claim, and he went on to state that the law would not permit a patentee to claim more "It will permit him to claim than he has invented. that which he has invented by means of successful experiments or otherwise, and which he has given to the public, but not that which is the mere subject of his speculation or imagination, or of his endeavouring to grasp more than he is entitled to. I think we are bound to give, as far as possible, the fullest effect to an invention; but, on the other hand, I think we are also bound to oppose the endeavours to make a patent grasp at and embrace a number of matters that were never in the head of the inventor."

In another part of the specification, the patentee described a wheel with straight arms, and then he said, "I propose to construct the wheel of every variety of configuration, so long as it is constructed with a channel in the interior." The defendant had made use of a wheel with bent arms, and the patentee treated this as an infringement, although he admitted that at the time he obtained his patent he had never thought of bent arms, and also that curved arms almost trebled the effect of the machine. The judge told the jury that the patentee's claim to every shape of arm would not stand. To hold that it was good would be to reward a man who had rashly and ignorantly taken out a patent on a subject he had not appreciated. same learned judge, when presiding at the trial of Stevens v. Keating (2 W. P. C. 184),—an action for infringing a patent for processes for combining materials to form cements, -said, with reference to that

part of the specification which was held to claim the use, not only of a particular acid, but of all acids which might succeed, that no patentee could be allowed to make such a claim, and to say, Whereas other substances will succeed, I claim them all.

Under a patent for improvements in weaving figured fabrics, the specification described, and the drawings illustrated, mechanism for weaving coach lace, but the patentee said that he did not confine himself to narrow goods only, as his improvements were applicable to the production of carpets. It was shown that the specified mechanism could not be adapted to the weaving of carpets by merely enlarging it, but required certain additions to be made to it before it could be employed for that purpose. Pollock, C. B., told the jury, at the trial of an action for an infringement, that if carpets could not be made by the means stated in the specification, the patent was not good; and the jury returned a verdict in favour of the defendant. (Crossley v. Potter, Macr. P. C. 240.)

A perusal of these cases will show that it is safer for a patentee to restrict his claim to the use of those processes, or those materials, which he has found by actual trial to answer the purpose, than to extend it to matters of which he has no accurate knowledge; since, in doing this, he may either claim something which will not answer the object in view, something which is not new, or something which he does not sufficiently describe. The law will aid him, without any general claim in his specification, in repressing infringements which are an illegal imitation of his process behind a colourable variation, or by means of mechanical or chemical equivalents.

"The safest course for patentees to adopt" (said Pollock, C. B., to the jury on the trial of Crossley v. Potter, Macr. P. C. 256) "in framing their specifica-

tions is, instead of including everything, to confine themselves specifically to one good thing, and a jury will always take care that if that be a real invention, no man under colour of improvement shall be allowed to interfere with that which is the offspring of their genius."

Since the specification is to be read along with, and is always considered as part of, the letters patent, the two must not be inconsistent. The invention referred to in the patent must be the invention described in the specification. Instances of the fatal effect of an inconsistency here have been already noticed in Chapter V.

If the specification omit to mention anything which is essential to the carrying into effect of the invention, such as any material, apparatus, process, or ingredient, this will render the patent invalid. In a patent for trusses, the patentee omitted to state that the steel of which they were made was to be tempered with tallow, and Lord Mansfield held it void. (Liardet v. Johnson, 1 W. P. C. 53.) When a patent was granted to Dr. James for fever powders, he stated in his specification the materials of which they were composed, but omitted to describe the quantity of the ingredients. This being the case, said Lord Mansfield, he never durst bring an action for infringement, and it was certainly wise in him not to do so, as no patent could stand on such a specification. (1 W. P. C. 54 n.) The specification of Neilson's patent omitted all mention of water-tuyeres; if the apparatus (said Parke, B.) would not be beneficial without them, then it is of no use to the public as it is described in the specification, and the specification would be bad. (Neilson v. Harford, When a patentee prepared the 1 W. P. C. 317.) specification of his invention of spinning machinery, he said nothing as to the difference in the velocity of Having brought an action for an incertain rollers.

fringement, and gone into evidence to show what his invention was, Buller, J., remarked, "The man comes to give an account of the invention, and says, I had calculated, and the difference of the velocity was to be Now he has not said a word of that in as five to one. In that, he has kept back the knowhis specification. ledge he had as to the size of the rollers and their velocity, and it is left to people to find it out as chance may direct." The patent was accordingly held bad. (Rex v. Arkwright, 1 W. P. C. 70.) Again, under a patent for improvements in steam-engines and paddlewheels, a difference which had to be made in the length of certain rods was not given in the specification, and it was attempted to explain this by saying that the difference in the length, being small, would not be very material. "But the whole question" (said Alderson, B.) "is small, therefore it ought to have been specified; and if it could not be ascertained fully, it should have been so stated. . . . The small adjustment of these different lengths may have been made for the purpose of making the machine work more smoothly; if so, it is just as much necessary that it should be stated in the specification as that the tallow (referring to the case of Liardet v. Johnson) should be mentioned." (Morgan v. Seaward, 1 W. P. C. 182.) The drawing attached to the specification under a patent for improvements in lamps did not show, and the specification itself did not state, where the air was to be admitted in the second burner, and without admitting air the wick would not burn. Jessel, M. R., held that the specification was insufficient; and to the argument that a workman would correct the drawing by putting in the opening, the judge replied that in contrivances where the invention was of a trifling nature, and the whole merit very small, if a patentee undertakes to teach people how to do things better, he must fully

describe his plan, and not leave anything for the invention of others. (Hinks v. Safety Lighting Company, L. R. 4 Ch. D. 607.)

A patent was obtained for improvements in floating docks. In an action for an infringement it was proved that the construction of floating docks was not new, but the plaintiff alleged that his invention consisted in the application of iron so as to form air-tight and water-tight chambers. Now there was no mention of iron in the specification, and it was held both by the judge on the trial and by the Court of Common Pleas that if this were so, the plaintiff had not complied with the conditions of the letters patent, which required him duly to describe the nature of the invention and in what manner it was to be carried out. (Mackelcan v. Rennie, 13 C. B. N. s. 52.)

The specification under a patent for an invention for preserving animal substances in a fresh state for a long time, stated that it consisted in the application of certain solutions, numbered 1, 2, 3, and 4, to the matters intended to be preserved. The mode of applying solutions numbered 2, 3, and 4 was set forth, but nothing was said as to the mode of applying solution No. 1. It was held both by the Court of Session in Scotland, and by the House of Lords on appeal, that the patent was bad on account of the want of a sufficient description of the manner in which the invention was to be performed. (Bailey v. Roberton, L. R. 3 App. Ca. 1055.)

It would seem from Crossley v. Beverley (3 C. & P. 515), that in construing a specification, the state of the particular manufacture at the date of the patent must be kept in view. In this case, in describing a gas-apparatus, no directions were given as to a condenser; but since a workman capable of constructing a gas-apparatus knew that he would have to put it in,

the specification was held sufficient. The patent in Russell v. Cowley (1 W. P. C. 459) was for a method of manufacturing iron tubes without the use of a mandril. The specification gave no directions as to leaving out the mandril; but it was held that an intelligent workman would sufficiently understand, from the purport of the specification, that a mandril was not to be used. So, in Beard v. Egerton (8 C. B. R. 165), it was held that a competent operator would perceive, on perusing the whole specification, that it would not be necessary to interpose an operation at a certain stage in the process of daguerrectyping.

A patentee is bound to describe the most advantageous method within his knowledge for carrying his invention into effect; and he ought to put the public in possession of his secret in as ample and beneficial a way as he himself uses it. In Wood v. Zimmer (Holt, N. P. 57) a patent for a method of making verdigris was contested. It seemed that verdigris was made by the process set forth in the specification; but that the patentee was in the habit of secretly putting aquafortis into the boiler. The copper, forming one of the ingredients, was thereby more rapidly dissolved; but the verdigris produced was neither better nor cheaper than that made according to the specification. Gibbs. C. J., considered this a prejudicial concealment, and a breach of the terms which the patentee made with the public.

Letters patent were obtained for a mode of making a medicine, composed of three salts, commonly sold in the shops under certain well-known names. The specification, instead of describing these salts by their names, described the processes by which they were produced, and then pointed out the proportions in which the salts were to be combined in order to form the medicine the subject of the patent. The methods of

producing the separate salts were not essential to the combination, and formed no part of the invention. It was held at Nisi Prius that the specification was bad, Abbott, C. J., saying that it is the duty of any one to whom a patent is granted to point out in his specification the plainest and most easy way of producing that for which he claims a monopoly; and to make the public acquainted with the mode which he himself adopts. If a person would be led to suppose a laborious process necessary to the production of any one of the ingredients, when in fact he might go to a chemist's shop and buy the same thing as a separate simple part of the compound, the public are misled. (Savory v. Price, 1 Ry. and Moo. 1; 1 W. P. C. 83.)

There are many other cases which show that if the patentee knows of any circumstance which conduces to the advantage of his manufacture or process, he is bound to mention it in his specification. importance can be withheld or concealed without danger to the patent. In Turner v. Winter (1 W. P. C. 81), Buller, J., said, that if the patentee make the article for which the patent is granted of cheaper materials than those which he has enumerated, although the latter may answer the purpose equally well, the patent is void, because he does not put the public in possession of his invention, or enable them to derive the same benefit as In Sturtz v. De la Rue (1 Carp. Rep. he himself does. 463, 5 Russ. 322, 1 W. P. C. 83), it appeared that the patentee had mentioned in his specification a certain substance, under the name of the finest and purest chemical white lead, which was to be used in giving paper a glaze, preparatory to its receiving an impression from an engraved plate. He himself imported from Germany, for this purpose, a preparation called Kremnitz white; but he said nothing about this in his specification. It was shown that there was no article known in the chemists' shops in London which answered to the patentee's name, and that the purest white lead which could be purchased there did not answer the purpose. It was held, on these facts, that the patentee had not made that full disclosure which he ought to have made; and his patent was adjudged "A man has no right" (said Pollock, C. B., in his address to the jury on the trial of Tetley v. Easton, Macr. P. C. 76) "to patent a principle, and then to give the public the humblest instrument that can be made from his principle, and reserve to himself all the better part of it." (See also Derosne v. Fairie. 1 W. P. C. 158.) In Walton v. Bateman (1 W. P. C. 622), Cresswell, J., laid down this rule:—If a man knows a better mode than that which he states to the public, his patent will be vitiated. And in Heath v. Unwin (2 W. P. C. 243), Coleridge, J., said, "If the inventor of an alleged discovery, knowing of two equivalent agents for effecting the end could by the disclosure of one preclude the public from the other, he might for his own profit force upon the public an expensive and difficult process, keeping back the simple and cheap one, which would be directly contrary to the good faith required from every patentee in his communication with the public."

In Neilson v. Harford (1 W. P. C. 321), the judge told the jury, that if the patentee believed that certain internal partitions in the hot-blast apparatus were useful, the patent would be void, since he had omitted to say anything about them in the specification.

On the other hand, an inventor who obtains a patent for the useful application of a principle is not to be called on to set forth every mode of applying it. It is sufficient if he shows some of its useful applications, those applications being the best illustrations of the invention known to him. See what fell from Lord Abinger in Neilson v. Harford (1 W. P. C. 356). But it must be borne in mind, that a patentee cannot, by making a general claim, cover improvements and applications of which he was ignorant at the date of his specification (Tetley v. Easton, Macr. P. C. 77).

Nor is it obligatory on a patentee, when referring to materials and ingredients to be used in carrying his invention into effect, to enter into minute details as to such materials and ingredients, if they are known in the shops, and can be readily purchased under the names which he gives them (Mackintosh v. Everington, 2 Carp. Rep. 191). So also a person who takes out a patent for an invention consisting of the use of known materials in new proportions, though bound to state the most suitable proportions within his knowledge, is not bound to limit his claim to the precise proportions recommended by him in his specification. (The Patent Type Founding Company v. Richard, Johns. The names of articles mentioned in a specification must be taken to be used in their ordinary com-Thus, a direction in a specification to mercial sense. use dry arsenic acid in the manufacture of dyes was held to refer to the ordinary arsenic acid of commerce (which is dry to the touch, although it contains water in combination), not to anhydrous arsenic acid which could not be commonly bought in the trade, and which would not answer the purpose. (Simpson v. Holliday, 20 Newt. Lon. J. 118; 5 N. R. 340; 1 H. L. C. 315.) And see Sturtz v. De la Rue, 1 W. P. C. 83 n.; Stevens v. Keating, 2 W. P. C. 183, 187; Muntz v. Foster, 2W.P.C. 104. Whether or not a specification describes with sufficient accuracy the material out of which an article is to be made, is a question for the jury. (Bickford v. Skewes, 1 W. P. C. 214; Derosne v. Fairie, 1 W. P. C. 154; Elliot v. Turner, 2 C. B. 446; Wallington v. Dale, 7 Ex. 888.)

COMBINATIONS.

The patentee ought to state whether his invention consists of the useful application of a principle, or whether it lies in a particular form or arrangement or combination of parts. It has been already stated (see p. 19) that a number of old and well-known things, such as implements, machines, or parts of machines, may be combined so as to form a new and useful instrument or machine; and a patent obtained for such combination will be valid, care being taken that the specification does not claim the old parts as well as the "If," said Gibbs, C. J., to the novel combination. jury, on trying the case of Bovill v. Moore, "a patenteo has in his specification asserted to himself a larger extent of invention than belongs to him-if he states himself to have invented that which was well known before—then the specification will be bad." . . . "If a patentee has only invented an improvement, then his specification by which he claims the whole will be bad. If, on the other hand, he has invented an engine which consists of a perfectly new combination of parts, although all the parts were used before, yet he will be entitled to support his patent for a new machine." . . . "If a combination of a certain number of these parts existed up to a given point before the date of his patent, and if the patentee's invention sprung from that point, and added other combinations to it, then his specification, stating the whole machine as his invention, is bad." (Dav. P. C. 404, 412, 413.)

It may be that all the parts of an invention, taken separately, are old, the patent being obtained only for a novel combination of them. In preparing his specification for such an invention, the patentee must limit his claim to the new combination, and to prevent misconstruction, it is desirable, though not

absolutely necessary, that he should distinctly disclaim the old parts. (Lister v. Leather, 3 Jur. n. s. 811; S. C. in error, 8 E. & B. 1004; Seed v. Higgins, 8 H. L. C. 550.) The case of Kay v. Marshall (2 W. P. C. 71) deserves attention with reference to this rule. The inventions claimed in the specification were two. First, certain new machinery for macerating flax; and secondly, improved machinery for spinning flax. The first invention would very well have supported the patent separately considered. It was that part of the specification which described the second invention that The so-called improved machinery, conbroke down. sidered in itself, and apart from its application, was shown to be wanting in novelty, and hence the patent fell to the ground. Had Kay, instead of claiming the invention of improved machinery, claimed only the invention of a combination of a known process of wetting flax, with the use of known machinery for spinning the same, certain parts of such machinery being at a given distance from each other, the patent would, doubtless, have been held good. nation was new, although the process and the machinery The invention was one of great value, and were old. if the specification had been rightly framed, the patentee might have had the benefit of it, without suffering the anxiety and expense of litigation in the common law courts, the Court of Chancery, and the House of Lords.

The case of Tetley v. Easton (Macr. P. C. 48) went three times before a jury, and on two of the occasions the plaintiff failed by inattention to this rule. His patent was for improvements in machinery for raising and impelling water. The specification described a great number of mechanical contrivances tending to effect the object in view, and concluded by claiming, as the patentee's invention, the several contrivances,

"both when all used in combination, and when used severally." It was shown, on the trial of the first action for an infringement, that several of these contrivances were old; and with regard to one in particular, which the defendants were charged with infringing, that a person named Hales had previously procured a patent for something substantially the same. The jury thereupon found a verdict for the defendants upon issues which raised the question of the novelty of the plaintiff's invention. Subsequently to this trial. the plaintiff entered a disclaimer as to several parts of his specification, and brought another action against the The jury again returned a verdict same defendants. for the defendants. A rule to set aside the verdict, and for a new trial, having been obtained, the legal questions came on for argument before the full Court. It appeared that the amended specification described a centrifugal pump, composed of a hollow wheel, revolving within a case furnished with pipes for conveying the water. This wheel was not stated to be old. nor was it disclaimed. The specification claimed generally the machinery for raising and impelling It also claimed the application of the inventions before mentioned, "both when all used in combination, and when used severally." It was held that the hollow revolving wheel was thereby claimed, and as this was an old invention, the specification was bad, for the patentee had described the wheel as part of his own apparatus, and if he had not intended to claim it, he ought to have disclaimed it. By a second disclaimer the patentee's claims were reduced to the single one of "the means of increasing the action of the machine by causing the liquid to enter the wheel at both sides;" and he then brought a third action for the infringement of his patent. Unfortunately it was shown that previous inventions had embraced a contrivance for the admission of the water on both sides of the wheel; and the learned judge (Willes) directed the jury to find for the defendant, for the reason that, although the wheel had been previously combined with apparatus which made the combination useless, yet that the contrivance in question had been made public property, and could not of itself be made the subject of a patent. The Court, on the argument of a rule for a new trial on the ground of misdirection, said, that the use of a wheel known before, in a manner known before, could not be deemed an invention capable of sustaining a patent, and held that the judge was right, and the defendant consequently retained his verdict. (2 C. B. N. S. 706.)

The specification under a patent for an improved turning-table for railway purposes, after describing the machinery, claimed as new "the improved turningtable as hereinbefore described." This was held to be a claim of the parts, as well as of the combination forming the improved turning-table. Now, it appeared, on the trial of an action for an infringement. that no part of the machinery was new, except certain suspending rods. It was held that the specification was defective, by reason of its not distinguishing what was old from what was new. "Every patentee," said Jervis, C. J., "must, in his specification, describe the nature of his invention in such a way as that those who read it with common, ordinary understanding, and fairly read it, may see and understand what is new and what is old." (Holmes v. London and N. W. Railway Co., Macr. P. C. 26.)

In the case of Foxwell v. Bostock (4 De G. J. & S. 298) Lord Westbury, C., laid down the rule to be that in a patent for an improved arrangement or new combination of machinery, the specification must describe the improvement and define the novelty, otherwise and in

a more specific form than by the general description "On both principle and auof the entire machine. thority it is most necessary that the specification should ascertain the improvement, when the patent is for an improved—that is, for a new combination. At the date of this patent many combinations of machinery, or, in other words, many machines for sewing or stitching by a needle and shuttle were known and If in that state of things a patent is taken out for an improved arrangement or combination, the patentee is bound to show in what the improvement consists, and how it is to be effected. But this obligation is not discharged by a description of the entire machine which embodies the improvement, but which description does not distinguish the improvement; and thereby renders it undiscoverable, except upon a minute comparison and collation of all existing combinations with the new combination that is claimed. A specification so framed has the effect of concealing rather than of disclosing the invention." The plaintiff's counsel stated that the improvement consisted of an arrangement of three cams on one shaft, by the direct action of which the three principal movements in a needle and shuttle machine were effected. plaintiff's evidence went to show that this arrangement formed the novelty and utility of the machine. this clear and simple statement is not to be found anywhere in the specification. It is true that the cams and shafts are described indiscriminately with the rest of the machine in the specification, but there is nothing to indicate that it is this addition which constitutes the improved arrangement or the new combination." The specification was therefore held to be defective and the patent invalid. (See also the observations of James, L. J., in Parkes v. Stevens, L. R. 8 Eq. 366.)

The case of Foxwell v. Bostock, however, is not to be understood as deciding that where a combination is alone claimed it is necessary to distinguish the new parts from the old, for in such a case the only invention protected by the patent is the combination, and if that is properly set forth it is enough, without separating new parts from old. Under the circumstances supposed, it can be of no moment, so far as the point before us is concerned, whether the parts are all old or partly old and partly new, and therefore a description of the parts and of the manner of arranging them into a working whole, followed by a claim restricted to the combination, will be a sufficient description of the invention. (Harrison v. Anderston Foundry Co., L. R. 1 App. Ca. 574.)

The preceding cases will show to patentees whose inventions consist of a combination of parts, the necessity, whilst laying claim to the novel combination, of abstaining from claiming directly or inferentially any of the old parts. On the other hand, if a patentee conceives that he has a right to one or more of the parts as being in themselves novel and useful inventions, he ought to set them forth and claim them. "If a man really wants to patent not only the whole, but something less than the whole of what he calls 'a new arrangement, construction, and combination of parts,' he must clearly show that he claims that something less." (Per James, L. J., in Clark v. Adie, L. R. 10 Ch. 667, affirmed by the House of Lords, L. R. 2 App. Cas. 315.)

A patentee sometimes obtains a second patent for improvements upon an invention which formed the subject-matter of a previous patent, and the second specification usually refers to the first. Care should be taken in preparing the second specification to make it distinguish clearly the later improvements from the earlier invention; for notwithstanding the case of Harmer v. Playne (11 East. 101), there is reason to suppose that unless it can be seen on reading the second instrument, after the expiration of the earlier patent, of what the later invention consists, as something distinguishable from an old part, the second patent would be pronounced invalid.

The fatal effect of ambiguous language in a specification is illustrated by the case of Hastings v. Brown (17 Jur. 648; S. C., 1 E. & B. 454). Charles Johnstone obtained the grant of a patent on the 21st December, 1844, for an invention of "certain improved arrangements for raising ships' anchors, and other purposes." The specification claimed as the invention "a cable holder to hold without slipping a chain cable of any size," but it could not be gathered from it whether the inventor claimed a cable holder to hold a chain cable of any one size, or to hold chain cables of different sizes. Now, a cable holder to hold a chain cable of any one size was already known at the date of the patent. "The patentee," said Lord Campbell, when the case was argued before the Court of Q. B., on a motion to enter a nonsuit, "ought to state distinctly in his specification what is his invention, and to describe the limits within which he is to enjoy a monopoly. That is not done in this case with respect to the nature of the cable holder. claimed [in the pleadings] is a right to construct a capstan which will raise chain cables of different di-Does the plaintiff disclose in his specification that he claims that invention? If it is only claimed with regard to one cable, then there is no infringement of the patent. The vice of the specification is, that it is quite equivocal what the claim is. There is nothing in the title which at all assists us;

and when we look to the description in the specification, which speaks of 'a chain cable of any size,' I think that the proper construction to be put upon the words is that they mean 'one chain cable.' At all events, they are capable of that meaning; and if the specification is equivocal, it is bad." And Mr. Justice Colcridge added, "If the specification on a fair interpretation be equivocal, it is insufficient." The rule for a nonsuit was accordingly made absolute.

The specification under a patent for certain methods of making cements, described a method of making cement from gypsum, in the course of which an alkali, neutralized by an acid, was directed to be used; sulphuric acid and potash being stated to be the best acid and alkali for the purpose. Another method for making cement from limestone and chalk was then described, and consisted also in the use of alkali, neutralized by an acid. An action was brought for an infringement of this patent. The infringement complained of was the use of borax in making cement, borax being composed of an acid (boracic acid) and an The patentee, however, failed, on acalkali (soda). count of his defective specification. If he confined himself to sulphuric acid and potash, then the defendant was not liable, seeing that he had used neither; if he claimed the use of all acids and alkalies, his claim was bad, because it was proved that there are some acids and alkalies which would not answer the purpose; and if he claimed only those acids and alkalies which were proper and suitable, he was bound to state what they were, otherwise experiments would have been necessary to discover what were suitable and what were (Stevens v. Keating, 2 W. P. C. 194.) See also Muntz v. Foster (2 W. P. C. 109).

Hills, in the specification under his patent for the purification of gas, claimed the use of "hydrated or

precipitated oxides of iron." Now, if this meant all hydrated oxides of iron, the claim would have been too large, inasmuch as some of them would not effect the purpose, and the defendant, in an action for an infringement of the patent, argued that this was the meaning. The Court of Exchequer, however, although admitting that the language was not accurate, held, in their desire to uphold the specification, that the patentee meant to refer to such hydrated oxides as were precipitated. (Hills v. London Gas Light Co., 5 H. & N. 312.)

If the specification contains language calculated to mislead as to an important part of the patented process, as where it contains positive misdirections as to the mode of operating, the patent will likewise be void. "You must not mislead people" (said Jessel, M. R., in Plimpton v. Malcolmson, 3 L. R. Ch. D. 531, 576) "by telling them to do something wrong, and leaving them to find out the mistake. . . . You must not give people mechanical problems and call them specifications."

On the trial of Palmer v. Wagstaff (Newton's Lond. Jour. vol. 43, p. 131), an action brought by a candle manufacturer for an infringement of a patent for improvements in the manufacture of candles, it was alleged that the specification contained a positive misdirection as to the position in which the wicks were to be placed in the process of manufacture. The object proposed was the production of a candle requiring no snuffing, by using two or more plaited wicks, arranged in such a manner that they would separate and bend outwards as the candle was burned. Now, it was shown that if the directions of the specification were followed, the candle would require lighting at the bottom, instead of the top. If lighted at the top, the wicks converged, instead of diverging, and pro-

duced a long snuff. The judge (Pollock, C. B.) told the jury that this was a serious mistake, and though the verdict was given against the plaintiff upon other points than those connected with the validity of the specification, there is reason to suppose that this instrument could not have been supported. See also Savory v. Price (1 Ry. and Moo. 1; 1 W. P. C. 83); Bickford v. Skewes (1 W. P. C. 218).

It has also been decided, that if two methods of doing a thing are described in the specification, and by one of these it cannot be done, the specification is bad. (The Queen v. Cutler, Macr. P. C. 137; Beard v. Egerton, 8 C. B. 165.)

Medlock's specification of his invention for making red and purple dyes from aniline commenced the description of the process thus: "I mix aniline with dry arsenic acid and allow the mixture to stand for some time, or I accelerate the operation by heating it to or near its boiling-point until it assumes a rich purple colour, and then I mix it with boiling water and allow it to cool: when cold it is filtered and decanted." When the case went before the House of Lords, it was held, in affirmation of the view taken by the Lord Chancellor, that on the construction of the whole specification two processes, a hot and a cold process, were described, and as it was proved that only the hot process was effective, the specification was declared to be bad and the patent consequently invalid. It was urged that every person well informed on the subject could see that the cold process was ineffective, but "this," it was said, "would be to correct the specification by the superior intelligence of the reader." (Simpson v. Holliday, 13 W. R. 577, affirmed L. R. 1 H. L. 315.)

In Booth v. Kennard (2 H. & N. 84), an action brought for the infringement of a patent for improve-

ments in the manufacture of gas, the specification was held bad, because it claimed generally the exclusive privilege of making oil directly from cleaginous seeds; and, instead of describing particularly how this was to be done, only stated that the mode of using the materials might be "the same as in the apparatus used in the ordinary mode of making gas from coal." The Court deemed such a description too vague and general, when coupled with a sweeping claim like that above mentioned. And the Court came the more readily to this conclusion, when it appeared that the principle or leading idea of the alleged invention was not new.

Then as to the general tenor of the specification, the language must be clear and precise; the explanation must be intelligible to a person of ordinary skill and ability, acquainted with the particular subject; and the directions such that, by pursuing them, he would produce without difficulty the result which the patentee describes. (Tindal, C. J., in Gibson v. Brand, 1 W. P. C. 631; Beard v. Egerton, 8 C. B. 165.) Lyndhurst, L. C., said, in Sturtz v. De La Rue (1 W. P. C. 83 n.), that the specification must describe the invention in such a way, that a person of ordinary skill in the trade should be able to carry on the process. Lord Denman, in Bickford v. Skewes (1 W. P. C. 218), said that the specification is addressed, not to persons entirely ignorant of the subject-matter, but to artists of competent skill in the branch of manufactures to which it relates. The persons whom the specification ought to be designed for are persons of ordinary skill and ability; not those of special and unusual practice, knowledge, and capacity; not persons at the head of their profession. (Morgan v. Seaward, 1 W. P. C. 178; Neilson v. Harford, 1 W. P. C. 371; Househill Co. v. Neilson, 1 W. P. C. 692; Plimpton v. Malcolmson, L. R. 3 Ch. D. 531.)

Where the specification under a patent for a chemical operation was concerned, Mr. Justice Maule said, "A competent workman must be taken to know the known properties of iodine, silver, and nitric acid, or else the specification should have included a statement of the properties of each of these substances." (Beard v. Egerton, 8 C. B. 165.)

But when placed in the hands of a person of ordinary skill and intelligence, the specification must be able to show him how the invention is to be carried into effect without further assistance, and without needing corrections or fresh invention on his part. There must be no necessity to try experiments in order to accomplish the end promised by the patentee. The King v. Arkwright (1 W. P. C. 66), Buller, B., said that the specification must be such that mechanical men of common understanding (the validity of a patent for a machine being in dispute) must be able to make the machine by following its directions, without any new additions or inventions of their own. And Parke, B., in Neilson v. Harford (1 W. P. C. 371), said that to be valid, a specification should be such as, if fairly followed out by a competent workman, without addition or invention, would produce the machine for which the patent is taken out. been previously laid down in The King v. Wheeler (2 B. & Ald. 349), that a specification which casts upon the public the expense and labour of experiments and trial is undoubtedly bad. It would, however, seem, that if any degree of benefit can be produced by complying with the directions of the specification, and without having recourse to experiments, that would be sufficient to save the patent; it is not necessary that the maximum degree of benefit should be produced (Neilson's Patent, 1 W. P. C. 318). In an action for infringing a patent for an improved mode of paving streets with

blocks, so shaped that each side of a block was bevelled both inwards and outwards, it was objected by the defendant that the specification gave no direction as to the angle at which the bevels were to be made. iudge who tried the case (Lord Abinger) told the jury, that if any angle would be of some use, the specification was good; but if some particular angle was essential, then, as the specification left that to be discovered by experiment, it was deficient and bad (Macnamara v. Hulse, 2 W. P. C. 129). But Mr. Justice Bayley said (in the case of Crompton v. Ibbotson, 1 Carp. Rep. 462), that a patentee, knowing that given materials will not answer the purpose, is bound so to word his specification as to prevent others from trying experiments on that which he knows will not answer. this case a patent for an improved method of dyeing and finishing paper came into question; the specification described the paper as being conducted to a heated cylinder by means of cloth, "which cloth may be made of any suitable material, but I prefer it to be made of linen warp and woollen weft." Now the patentee had ascertained from repeated trials that no other substance would answer the purpose. held that the public had not the full benefit of the inventor's discovery, and persons misled by the specification might be induced to make experiments which the patentee knew would fail (1 W. P. C. 83). This, however, must be considered an extreme case.

In connection with this subject the following observations of Lord Westbury, C., are worthy of attention, "When it is stated that an error in a specification which any workman of ordinary skill and experience would perceive and correct will not vitiate a patent, it must be understood of errors which appear on the face of the specification, or the drawings it refers to, or which would be at once discovered and corrected in

following out the instructions given for any process or manufacture, and the reason is, because such errors cannot possibly mislead. But the proposition is not a correct statement of the law if applied to errors which are discoverable only by experiment and further Neither is the proposition true of an erinquiry. roneous statement in a specification amounting to a false suggestion, even though the error would be at once observed by a workman possessed of ordinary knowledge of the subject. For example, if a specification describes several processes or several combinations of machinery, and affirms that such will produce a certain result which is the object of the patent, and some one of the processes or combinations is wholly ineffectual and useless, the patent will be bad although the mistake committed by the patentee may be such as would at once be observed by an ordinary workman." (Simpson v. Holliday, 13 W. R. 577.)

It may be inferred from the case of Huddart v. Grimshaw (1 W. P. C. 85), that the assertion in the specification of something being important, when in point of fact it is not, will vitiate the patent, because there is evidence of an attempt to deceive. In Turner v. Winter (1 W. P. C. 80), Ashurst, J., said that if there is any unnecessary ambiguity affectedly introduced into the specification, or anything which tends to mislead the public, the patent is void. And it was laid down in Galloway v. Bleaden (1 W. P. C. 524), that if there is a want of clearness in the specification. so that the public cannot afterwards avail themselves of the invention, much more if there is any studied ambiguity in it, so as to conceal the invention from the public, no doubt the patent would be completely Again, if anything is said to be immaterial which is in reality material, this will be a fatal defect. Thus in Neilson v. Harford (1 W. P. C. 313),

Parke, B., said, "The patentee states that the size and form of the vessel in which the air is heated, previous to its being driven into the furnace, are immaterial. Now, my strong opinion is that the clause is an incorrect statement, and that, being untrue, vitiates the specification, and prevents the patent from being a good patent." See also Simpson v. Holliday (13 W. R. 577).

Misrepresentations as to the object or capabilities of the invention, or as to other important matters, will deprive the inventor of the benefit of his patent. For instance, a patent was obtained for a machine for making paper in single sheets from one to twelve feet wide. It was proved that the machine would make paper only of one definite width, and that if paper of some other width was required, another machine must be employed. It was held by the Court of K. B. that the capability of the machine had been misrepresented in an important respect, and that the patent was void (Bloxam v. Elsee, 6 B. & C. 169). And see Crossley v. Potter (Macr. P. C. 249).

Simple mistakes, being merely words used in an inaccurate sense, which words are often used, and are explained by the context, or by the drawings annexed, will not avoid the patent. Thus, in Bloxam v. Elsee (1 C. & P. 558; 1 Carp. Rep. 439), the specification made use of the expressions, vis de pression, vis de répulsion, and vis de réaction, for different screws; but the context and the drawings showed what was meant, and the objection taken on this ground was not sustained. In another specification the word "discolour" was used, with the meaning "discharge the colour." This, though a mistake in translating the French word "décolorer," was held not important enough to vitiate the instrument. A court of law will not insist upon accuracy in minute and unimportant matters; it will not insist upon strict logical correctness; it will overlook such evident errors as the mention of "imponderable substances." (Pollock, C. B., in Tetley v. Easton, at Nisi Prius, Newton's Lond. Jour. vol. 42, p. 58.) All it requires is, that the patentee shall make his meaning clear, and that his language shall be intelligible to the persons to whom it is addressed. It was said in the House of Lords that after a patent has stood inquiry and the test of time, the courts do not encourage verbal objections to the form of the specification. (Neilson v. Betts, L. R. 5 H. L. 1.)

It may here be remarked, that where there is doubt as to the meaning of particular expressions, and there is some question for the jury, competent persons may be called for the purpose of explaining the matter; but evidence is not admissible to explain or alter the plain and precise words of a specification, or to correct (Neilson v. Harford, 1 W. P. C. 313.) mistakes in it. In Elliot v. Turner (2 C. B. 446), it was held that the words of a specification are to be construed according to their ordinary and proper meaning, unless there be something in the context (which may be explained by evidence) to show that a different construction ought to prevail. Of course it is allowable to call persons of skill in the department of practical art to which the invention belongs, for the purpose of saying whether or not they understand the specification, and whether or not they could execute its directions, so as to produce a useful result. The persons composing juries are drawn indiscriminately from the general public, and it cannot be expected that they should of their own knowledge be competent to say whether the specification is one that fulfils its chief object,—that of instructing artists or workmen of ordinary competency to execute the invention. Hence it is obvious that in forming their opinion they ought to have the assistance of persons answering this description. (See C. J. Tindal's remarks in Walton v. Potter, 1 W. P. C. 595.)

It sometimes happens that, between the grant of letters patent and the filing of the specification, the patentce discovers that his original invention is capable of material improvement. The intervening period is allowed the patentee for the very purpose of perfecting his invention; and therefore, if he fails to communicate to the public the best information he possesses at the time of filing the specification, it will be void. Crossley v. Beverley (1 W. P. C. 117), it was objected that the patentee had added something to the invention between these two periods; but, said Bayley, J., "I think that if between taking out the patent and filing the specification the inventor makes discoveries which will enable it better to effectuate the thing for which the patent was obtained, not only is he at liberty to introduce them into his patent, but it is his bounden duty so to do, and it is not sufficient for him to communicate to the public the knowledge he has obtained before the specification." It must, however, be understood that the additions must strictly relate to the invention as it stood at the time of the grant of the patent. It is not competent for a patentee to introduce new heads into the specification, or in any way to extend the subject-matter of the invention (Crossley v. Potter, Macr. P. C. 240; Bailey v. Roberton, L. R. 3 App. Ca. 1055). And assignees of a patent should know that the specification itself is not conclusive evidence of the invention; for the inventor may be called to state in Court what his invention really was, and he may show that it was something different from that specified. (Bateman v. Gray, Macr. P. C. 111; Crossley v. Potter, Macr. P. C. 255.)

CLAIMS.

It is usual for a patentee to insert at the close of his specification certain clauses, which are known as The insertion of these claims is not insisted on by the law, but they offer an opportunity for the patentee to define his invention, and to set forth in a brief form what he considers the pith and "The real object of what is called a essence of it. claim" (said James, L. J., in Plimpton v. Spiller, L. R. 6 Ch. D. 412, 426) "is not to claim anything which is not mentioned by the specification, but to disclaim something. A man who has invented something gives in detail the whole of the machine in his specification. In doing that he is of necessity very frequently obliged to give details of things which are perfectly well known and in common use; he describes new combinations of old things to produce a new result or something of Therefore, having described his invention and the mode of carrying that invention into effect, by way of security he says: 'But take notice I do not claim the whole of that machine; I do not claim the whole of that modus operandi, but that which is new. and that which I claim is that which I am now about to state.' That really is the legitimate object of a claim, and you must always construe a claim with reference to the whole context of a specification."

Great care should be taken in preparing this epitomized definition, so as not to include things that are beyond the boundary of the invention, nor on the other hand to restrict the inventor's rights within too narrow limits. Where a specification clearly and distinctly claims a combination alone, a patentee is not bound to disclaim expressly everything he has described, because in such a case it will be held that everything which is not claimed is impliedly disclaimed (Harrison v. Anderston Foundry Company, L. R.

1 App. Ca. 574); and, therefore, where a patentee claims in his specification only an entire combination, he will be considered not to have claimed any of the minor combinations. A combination of three parts is a different thing from a combination of two of them; and if a patentee desires to secure the minor combination he must distinctly claim it (Clark v. Adie, L. R. 10 Ch. 667, affirmed on appeal, L. R. 2 App. Cas. 315). It is the patentee's duty to give distinct and definite information to the public somewhere in his specification as to the invention or inventions which he supposes his patent covers, and which he considers to be his own exclusive property. If he does this in the form of a claim, he must keep in mind what has just been stated, that everything which is not claimed is impliedly disclaimed. "With the view of getting this (information) into a narrow compass" (said Jessel, M. R., in Hinks v. Safety Lighting Co., 4 Ch. D. 607), "it has long been the practice to insert in specifications the distinct claim of what is said to be comprised in the patent; meaning that nothing else is comprised, that everything else is thrown open to the public; or, to put it into other words, if a man has described in his specification a dozen new inventions of the most useful character, but has chosen to confine his claim to one, he has given to the public the other eleven." When the claims refer to the invention in very short terms, and introduce the words, "as hereinbefore described," this will render an examination of the previous description necessary, in order to ascertain what the invention really is.

In drawing the claims in a specification which refers to a machine or apparatus, consisting of many old and new parts, it is desirable to introduce a general claim to the entire machine as a combination, and then separate claims to the new minor combinations: and to the new parts. An observance of this rule will be attended with useful results, in case there should arise any necessity to disclaim part of the invention.

In Kay v. Marshall (2 W. P. C. 39), Cottenham. L. C., said: "The claim is not intended to aid the description, but to ascertain the extent of what is claimed as new. It is not to be looked to as the means of making a machine according to the patentee's improvements. If, therefore, the specification containing the description be sufficiently precise, it cannot be of any consequence that expressions are used in the claim which would be too general if they proposed to be part of the description." Lister v. Leather (3 Jur. n. s. 811; S. C. in error, 8 E. & B. 1004). And if a claim to a material can be substantiated, the description in another claim of a particular user of that material comprehended in the general user claimed, will not vitiate the patent. (Neilson v. Betts, L. R. 5 H. L. 21; and see also Plimpton v. Spiller, L. R. 6 Ch. D. 412.)

On the other hand, where the description in a specification was in the first instance too general, but the inventor afterwards in describing his invention referred to certain figures in drawings annexed to the specification, and the claim was for the invention described with reference to those figures, the specification was held sufficient (Daw v. Eley, 14 W. R. 126, and on another hearing, L. R. 3 Eq. 497). See also Russell v. Cowley (1 W. P. C. 465), Thomas v. Welch, L. R. 1 C. P. 192.

All the claiming clauses may be struck out of the specification by disclaimer, if there remains sufficient in the specification to show distinctly what the invention is. (*Thomas* v. Welch, L. R. 1 C. P. 192.)

An important decision with respect to the extent of a patentee's claims was that delivered by Lord

Hatherley, L. C., in the case of Arnold v. Bradbury, L. R. 6 Ch. 706. A patent was obtained for an improved ruffle and sewing machine. The specification stated that the invention related to an improved frill or gathered fabric, and to the machinery for making the same; that the apparatus used in producing the article consisted of a peculiar mechanism for gathering and feeding one of the fabrics operated on, which mechanism was used in combination with a sewing machine, the latter being modified to receive it. gathers in a fabric were fed into the machine by mechanism without being scratched by a pointed instrument as when formed by hand. A description of the mechanism was then given. Drawings figured the mechanism, and one of them showed a portion of a sewing machine to illustrate its operation. claims were for—(1) The production by machinery of gathered work when it was simultaneously attached to a plain fabric by stitches; (2) the production by machinery of gathered work when it was simply gathered and secured on itself by stitches; and (3) the combination of mechanism for gathering with the mechanism of a sewing machine for the two purposes above mentioned. It was contended by the defendants, who admitted the infringement, that the patent was void. because the two first claims were too wide and general, inasmuch as they claimed the production of gathered work by any kind of machinery. Hatherley, however, said that a claim must be very large and vague indeed to justify any Court in saying that it is impossible to sustain a patent based upon it. He read the first claim as one for the production by machinery of that which had not been done by machinery before, viz. an improved frill. The inventor had stated in what the improvement consisted, and he described the machinery by which it was produced,

and then he said, I claim the producing of this by machinery, of which machinery I have given full details. As to the second claim, his lordship said that he could not tell that the frill produced without being scratched was not more durable and elegant than one formed by hand and scratched. If the inventor had produced a machine which dispensed with an injurious process, the judge said he could not in the absence of evidence take upon himself to say that it would not be the subject-matter of a patent, and he decided that there was no ground for holding that the claims were too large per se.¹

The following decisions have reference to the interpretation of "claims:"—Palmer v. Wagstaff (9 Exch. 494); Macalpine v. Mangnall (3 C. B. 496); Templeton v. Macfarlane (1 H. L. C. 595); Sellers v. Dickinson (5 Exch. 312); Seed v. Higgins (8 H. L. C. 550); Thomas v. Foxwell (6 Jur. N. s. 271); Dangerfield v. Jones (13 L. T. N. s. 142); Thomas v. Welch (L. R. 1 C. P. 192); Jordan v. Moore (L. R. 1 C. P. 624); Daw v. Eley (L. R. 3 Eq. 497); Hinks v. Safety Lighting Co. (L. R. 4 Ch. D. 607); Wright v. Hitchcock (L. R. 5 Ex. 37); Arnold v. Bradbury (L. R. 6 Ch. 706); Harrison v. Anderston Foundry Co. (L. R. 1 App. Ca. 574).

The address of Mr. Baron Alderson to the jury, on the trial of the case of Morgan v. Seaward (1 W. P. C. 170), touches on so many of the preceding points, and is so full of instruction, that we shall place a large part of it before the reader.

¹ Lord Hatherley remarked in this case that it was a singular fact that no case had been cited from the law books of any claim being held to be too large on account of the greatness of the claim independently of external evidence.

"Has Mr. Galloway (the patentee) sufficiently described the steam engine so as to enable any one to know what he has invented, and so as to enable a workman of competent skill to carry the invention into effect? Mr. Justice Buller, in the case of The King v. Arkwright, lays down as the criterion, that a man, to entitle himself to the benefit of a patent of monopoly, must disclose his secret and specify his invention in such a way, that others of the same trade, who are artists, may be taught to do the same thing for which the patent is granted, by following the directions of the specification, without any new invention or addition of their own. That is reasonable and proper; for people in trade ought to be told the manner in which the thing may be done in respect of which the patent How? Not by themselves becoming inis granted. ventors of a method of carrying it into effect, but by following the specification, without making a new invention or making any addition to the specification. If the invention can only be carried into effect by persons setting themselves a problem to solve, then they who solve the problem become the inventors of the method of solving it; and he who leaves persons to carry out his invention by means of that application of their understanding, does not teach them in his specification that which, in order to entitle him to maintain his patent, he should teach them—the way of doing the thing—but sets them a problem which, being suggested to persons of skill, they may be able to solve. That is not the way in which a specification ought to be framed. It ought to be framed so as not to call on a person to have recourse to more than those ordinary means of knowledge-not invention-which a workman of competent skill in his art and trade may be presumed to have. You may call upon him to exercise all the actual existing knowledge common to the trade,

but you cannot call upon him to exercise anything more. You have no right to call upon him to tax his ingenuity or invention. The public, on the one hand, have a right to expect that the specification shall be fair, honest, open, and sufficient; and, on the other hand, the patentee should not be tripped up by captious objections which do not go to the merits of the specification. Now, applying those criteria to the evidence in the cause, if you shall think that this invention has been so specified that any competent engineer, having the ordinary knowledge which competent engineers possess, could carry it into effect by the application of his skill, and the use of his previous knowledge, without any inventions on his part, and that he could do it in the manner described in the specification, and from the information disclosed in the specification, then the specification would be sufficient. If, on the other hand, you think that engineers of ordinary and competent skill would have to set themselves a problem to solve, and would have to solve that problem before they could do it, then the specification would be bad.

"Further, if a patentee is acquainted with any particular mode by which his invention may be most conveniently carried into effect, he ought to state it in his specification. . . . The specification must not merely suggest something that will set the mind of an ingenious man at work, but it must actually and plainly set forth what the invention is, and how it is to be carried into effect, so as to save a party the trouble of making experiments and trials.

"A specification is addressed to all the world, and therefore, all the world—at least those possessed of a competent skill—ought to be able to construct the machine by following that specification. It is not fair to you or to me, if we be less inventive than our

meighbours, that we should be prevented from constructing these machines by reason of the specification not giving a clear exposition of the way in which it is to be done. In the case of the steam-engine, there was put in on the part of the defendants a model, made, it was said, according to the specification, which model would not work. The model was a copy of the drawing, and would not work because one part happened to be a little too small, whereas if it had been a little larger it would have worked. Now, a workman of ordinary skill, when told to put two things together so that they should move, would, of course, by the ordinary skill and knowledge he possesses, make them of sufficient size to move. Then he would have to bring to his assistance his knowledge that the size of the parts is material to the working of the machine. That is within the ordinary knowledge of every work-He says-'I see this will not work, because it is too small; 'and then he makes it a little larger, and What is required is, that the specifinds it will work. fication should be such as to enable a workman of ordinary skill to make the machine."

The second invention to which the learned judge proceeded to refer, consisted, so far as it is now necessary to notice, in an improvement on paddle-wheels for propelling vessels, whereby it was said the float-boards or paddles would enter and come out of the water at positions the best adapted for giving full effect to the power applied. Connecting-rods were attached at one of their ends to the bent stems of the float-boards, and at the other to the disc. "The only observation" (continued the judge) "is, that he gives no dimensions. He fixes no points either for the centre of the eccentric or for the crank to which the eccentric centre is attached. Therefore, if those can only be ascertained by experiments subsequently to be made, then the

specification is bad. The whole, in some degree, turns upon the length of the rods and the position of the centre of the eccentric. . . . Now, you cannot treat the actual picture which is given in the drawing as any guide to the particular angle, or to the particular position of the eccentric; and for this simple reasonif that were the criterion, then the substance of the invention would be the particular angle contained in the particular drawing: and in order to show an infringement, they ought to have shown that Mr. Seaward's wheel entered the water at the same angle as the angle described by the drawing; and, therefore, in that case, you would be bound to find the first issue for the defendant, viz. that there was an infringement. however, you treat the drawing as only an illustration of the invention, and not as confining the invention to the particular angle there described, then you ought to find in the specification some directions which should enable you to construct the machine in a new form; or you ought to be satisfied that without any instructions a workman of ordinary and competent skill and knowledge would be able to do it. Mr. Brunel says, 'I have read the specification, and I think I could construct by it a machine at any required angle without difficulty.' But whether Mr. Brunel could do it or not is not the point. I dare say, Mr. Brunel, the inventor of the block machinery, could invent anything of the sort the moment it was suggested to him; but that is not the criterion. The question is, whether a man of ordinary knowledge and skill, bringing that ordinary knowledge and skill to bear upon the subject, would be able to do it. The evidence of Mr. Park is much more material. He says, 'I could, without any difficulty, make the machine so that the paddles could enter the water at any angle.' He prepared the models which have been used. Now the criterion is, whether

at the time the specification was introduced into the world, Mr. Park would have been able to construct the machine with his ordinary skill and knowledge, without the peculiar knowledge he has since obtained upon the subject, from being employed to make the models for Mr. Morgan; because it would not be at all fair to allow your verdict to be influenced by knowledge so But he says, with his ordinary knowledge and skill he could, without difficulty, construct a wheel so that the paddles should enter the water at any angle. He says, if the diameter of the wheel is given, which it is fair should be given, and the immersion of the float, and that is also fair to be given, he could do it. Those are reasonable data for him to require; and if with his ordinary skill and knowledge, and without that peculiar knowledge which he has obtained in consequence of his connection with the plaintiff and with his cause, he could do it, that would be evidence on which you would be entitled to place reliance. he tells you how he could do it. Now, I do think it would have been a vast deal better if the specification had given us the same information, for that is what a specification ought to do.

"The specification ought to contain a full description of the way in which it is to be done. The question really is, whether, upon the whole evidence, you are of opinion that the specification does fairly and fully and properly give to the public that information which the public are entitled to receive, that is to say, whether it tells them, without having recourse to experiments, how to do it, or whether it even tells them what is the course their experiments ought to take—to what point their examinations and experiments should be directed. He says he could do it with the skill he possesses; and he has described the manner in which he proposes to do it. He says, 'I have seen this drawing.' Then

he produces a drawing, and he says, 'This represents my plan of drawing it. An engineer of competent skill would have no difficulty in doing it.' His doing it himself I do not consider so material; but he says any engineer of competent skill would have no difficulty in doing it. That is material.

"Then when that drawing was shown, some of the gentlemen appearing on behalf of the defendants drew an angle upon it as the angle of entering, and asked him how that could be done. No donbt his principle would enable him to work out any angle; but there is a set of angles which would cause the centre of the eccentric to go beyond the wheel itself, which, therefore, it is impossible to carry into effect; but those angles are such as would not be required in ordinary practice by any persons. You should discard on both sides all exaggerated cases, and look to the substance of the thing. . . . It is most important that patentees should be taught that they are bound to set out fully and fairly what their invention is; for, suppose a person were to make an invention, and get a right of making it for fourteen years, to the exclusion of all other persons, it would be a very great hardship upon the public if he were allowed to state his specification in such a way that, at the expiration of his term of his patent, he might laugh at the public, and say, 'I have had the benefit of my patent for fourteen years, but you, the public, shall not now carry my invention into effect, for I have not shown you how it is to be done; I have got my secret, and I will keep it.' . . . Mr. Morgan, in practice, makes his rods of different lengths; and he must necessarily do that in order that the floats may follow at the same angle as the driving float enters the water. If so, he should have said in his specification, 'I make my rods of different lengths, in order that the rest of my floats may enter at the same angle; and the way to do that is so and so.' Or he might have said, 'It may be determined so and so.' But the specification is totally silent on the subject. fore, a person reading the specification would never dream that the other floats must be governed by rods of unequal length; the least of all could he ascertain what their lengths should be until he had made experiments. Therefore it is contended that the specification does not state, as it should have stated, the proper manner of doing it. He says, 'If they are made of equal lengths, though the governing rod would be vertical at the time of entering, and three would be so when they arrived at the same spot, yet the fourth would not come vertical at the proper point, uor would the fifth, sixth, or seventh.' Then they would not accomplish that advantage which professes to be acquired. The patentee ought to state in his specification the precise way of doing it. If it cannot be completely done by following the specification, then a person will not infringe the patent by doing it. If this were an infringement, it would be an infringement to do that perfectly which, according to the specification, requires something else to be done to make it perfect. If that be correct, you would prevent a man from having a perfect engine. He says, 'Practically speaking, the difference in the length of the rods would not be very material, the difference being small.' But the whole question is small, therefore it ought to have been specified; and if it could not be ascertained, it should have been so stated. . . . The true criterion is this: Has the specification substantially complied with that which the public has a right to require? patentee communicated to the public the manner of carrying his invention into effect? If he has, and if he has given to the public all the knowledge he had himself, he has done that which he ought to have

done, and which the public has a right to require from him. . . .

"The question on this part of the case resolves itself into this: Do the witnesses on the plaintiff's side satisfy you that the patentee has, in his specification, given to the public the means of making a machine which shall enter and leave the water at any angle that may be ordered; that is, if a man ordered a machine at an angle likely to be required for entering and going out, and to be vertical at the bottom, could an ordinary workman, with competent skill, execute that order by following the directions given in this specification? If you think he could, then the specification would be If, on the other hand, you think he would not be able to execute the order unless he sat down and taxed his invention to find out a method of doing that which has not been sufficiently described in the specification, then the specification would be bad."

CHAPTER VIII.

OPPOSITIONS TO THE GRANT OF PATENTS.

An inventor's application for a patent may be opposed at two stages of his proceedings, viz. (1) after he has given notice of his intention to proceed with his application under sect. 12 of the Patent Law Amendment Act, 1852, when the hearing will take place before the Law Officer; and (2) after the Law Officer's warrant for sealing the patent has been issued under sect. 15 of the same Act, when the case will be heard by the Lord Chancellor.

Oppositions before the Law Officer .-- Any person having an interest in the matter and being desirous of opposing an inventor's application for a patent must, within twenty-one days after the inventor's notice to proceed with his application has been published in the London Gazette, lodge, at the Great Seal Patent Office, particulars in writing of his objections to the application. At the expiration of the twenty-one days, the specification and particulars of objection are referred to the Law Officer, and the applicant is then entitled to take out a summons for a hearing of the objections before the Law Officer, who will fix a time within which the opponent must file statutory declarations in support of his objections. The applicant is then allowed time to file declarations in reply, the practice with respect to evidence being much the same as that of the Chancery Division of the High Court of Justice. The Law Officer then appoints a day for the hearing, as to which it is the practice to give each party seven days' notice. At

the hearing the parties may appear in person, or be represented by counsel, solicitors, or patent agents. Great delay frequently occurs in having oppositions at this stage finally disposed of, on account of the numerous other engagements of the Law Officers. They are naturally averse from stopping patents at this stage, because applicants have no power of appealing from their decision; and the only grounds upon which they decide not to allow an application to proceed, seem to be when there is proof of fraud on the part of the applicant; when previous public user of the invention is proved; or when the opponent is able to show that he is in possession of the identical invention. They do not consider the infringement of an existing patent to be a ground for refusing an application, because the invention for which a patent is sought may be a valuable improvement in respect of which the applicant may be well entitled to a new patent. point has been frequently decided by many of the One of these cases was the opposition Law Officers. of Robertson to Hamilton's application, No. 474, 1872, before Jessell, S. G. However, if the Law Officer should report that part of the invention is covered by an existing patent, the Lord Chancellor may refuse the new patent for that part. (See p. 167.)

Oppositions at this stage are often entered in the dark, and upon mere suspicion. Since the provisional specification is not accessible to the opponent (see Re Tolson's Patent, 6 De G. M. & G. 422), he has no means of ascertaining exactly what the applicant's invention really is. Nor must the opponent look to the Law Officer for assistance in this respect. For example, there was a case of opposition before Baggallay, A. G., in June, 1875, where the applicant had referred to a model which had been made an exhibit to one of his declarations. The Attorney-General held that as the

model was used to elucidate the contents of the provisional specification, which the opponent had no right to see, neither was he entitled to see the exhibit.

The decisions of the Law Officers are not reported, and it is not unusual to find different Law Officers holding different views upon the same points.

The Law Officer will not grant his warrant for the seal if an opposer clearly proves a previous public use of the invention. Cairns, S. G., in the case of W. Pursall's application for a patent for percussion caps, heard before him 1st September, 1858 (P. M. J. vol. iii. 2nd series, 320), when it was proved that another manufacturer, who opposed, had obtained and used the improved percussion powder and sold caps made with it, prior to the application for Letters Patent, refused his warrant for sealing the patent.

It has, however, been held that an experimental use, even when the experiment was necessarily made with some degree of publicity, is not a sufficient reason to induce the Law Officer to withhold his warrant. (Adamson's Patent, 6 De G. M. and G. 420.)

In the case of Alexander's application (P. M. J. vol. iv. 2nd series, 73), an opposition was entered by Reed, who alleged that he invented apparatus identical with that sought to be patented in the year 1849, and that he exhibited, in Demerara, drawings and a description of the identical apparatus, and published a description of it in the Royal Gazette of George Town, Demerara, in the same year, Kelly, A. G., adjourned the hearing for a period sufficient to enable the opposer to obtain the necessary evidence from Demerara, conditionally on the opposer giving, within four days, an undertaking to pay whatever damages the Attorney-General should award to the applicant upon proof of loss by reason of the postponement; if no such undertaking was given within the speci-

fied time, the patent to proceed. The opposer did not give the undertaking, and the patent was sealed. If the Law Officer is at all doubtful as to the effect of the evidence before him, he will allow the patent to proceed, that the question may be tried in a court of In the case of Dance's Patent (P. M. J. vol. vi. 2nd series, 298) opposition was entered on the part of James Stevens before Atherton, A. G., on the ground that the alleged invention was not a new invention, and that Dance was not the first and true inventor thereof. The opposer proved that crinoline fasteners similar to the alleged invention of Dance. were given to him by one Richardson, in the month of May, 1861, and that he exhibited the fastening publicly, and handed them to travellers for the purpose of taking orders for them. The travellers then proved their exhibition of the fasteners and their receipt of orders for them, prior to the 24th of June, 1861, the date of the application for the patent. There was no conflict of evidence on these heads, but the petitioner's declarations alleged that Dance had communicated the invention confidentially to Richardson. The Attorney-General finally gave his judgment as follows:—"I allow this patent to proceed, thinking that the question of fact, whether Mr. Dance or Mr. Stevens invented, and the mixed question of fact and law, whether the invention had been made public before Mr. Dance applied for protection, admit of too much doubt to justify a Law Officer in stopping the patent."

Where there are rival applications for a patent, it is the duty of the Law Officer to determine upon the evidence which patent ought to proceed; the question ought not to be remitted to the Lord Chancellor by issuing warrants for both patents. (Ex parte Henry, L. R. 8 Ch. 167.)

In cases where there are rival applicants, and the

Law Officer is satisfied that one of such applicants is entitled to one part of the invention, whilst the other can more fairly claim another part, he will issue his warrants to both, limiting the provisional specifications accordingly; this was done by Coleridge, S. G., in the matter of Craig and Macfarlane's applications (P. M. J. vol. iv. 3rd series, 366). The circumstances of the case were as follows: - Macfarlane applied for Letters Patent for "Improvements in rollers for paper-making machines," and obtained the usual provisional protec-The application was opposed by Craig, on the ground that he was the first inventor of an underpress roller, covered with vulcanite and vulcanized india-rubber which formed part of Macfarlane's provisional specification, and for which Craig had also applied and obtained the usual protection. parties were heard, in accordance with the practice of the Law Officers, in the absence of each other. Craig contended that he was the first inventor and applier of the roller, which had worked satisfactorily at one of his mills; that Macfarlane, who had obtained the material for the covering of the rollers from the North British Rubber Company, simply acted as Craig's employé, and had not the merit of the invention; and that Macfarlane had only applied for his patent after the rollers had been experimented with by Craig, and had been found successful. In answer to declarations filed by Macfarlane, in proof of his having experimented at a paper-mill at Wandsworth, Craig submitted that such experiments, assuming them to have been successful, had only reference to the under coutch-roll of the machine, and that Macfarlane upon his own evidence had not proved that he had ever experimented on the under-press roll, and was not entitled to the sealing of his patent. Macfarlane contended that he was entitled to the patent for the

coutch and press-rolls. Coloridge, S. G., decided to grant his warrant for the sealing of Macfarlane's patent, for the coutch-roll alone, and to grant his warrant for the sealing of Craig's patent for the press-roll.

Where an employer opposed the application of a person who was or had been in his service, on the ground that the invention sought to be patented probably resulted from investigations or experiments directed and paid for by the employer, the Law Officer, being satisfied of the bona fides of the opposition, granted his warrant on condition that the applicant should submit his provisional specification to the inspection of the opponent, and should strike out such portions of it as contained matters of the kind referred to by the opponent. This was done by Coleridge, S. G., in the case of Healey's application, No. 85, 1872, and also in the case of Conniff's application, No. 3895, 1872, as to which there was a cross opposition, the opponent Jenner (in whose service Conniff had been employed) having already obtained provisional protection for an invention bearing a title similar to Conniff's. examination of the provisional specifications, it appeared that the inventions did not interfere with one another, and both patents were accordingly allowed.

An application of Mackay and Rae for Letters Patent was made 24th March, 1875, and opposed by West and Du Vallon on the ground that Mackay and Rae's invention was similar to that covered by Letters Patent already granted and sealed to West and Du Vallon, upon an application dated June 18, 1875. Baggallay, A. G., said, "These inventions appear to me to be substantially the same. If Messrs. Mackay and Rae desire to proceed, their Letters Patent must bear date after the sealing of Messrs. West and Du Vallon's;" and the Letters Patent were accordingly sealed on the 11th August, in place of the 24th March, 1875.

Wilkinson's application, No. 4662, 1877, was opposed on the ground that the patent, No. 109, 1878, dated 8th January, 1878, was already sealed for substantially the same invention. Giffard, S. G., allowed Wilkinson's application to proceed upon condition that the patent be dated 9th January, 1878.

If the evidence is conflicting and the Law Officer cannot decide which side is speaking the truth, he will allow the application to proceed (Liddell's Patent, No. 3872, 1875, opposed by Stevenson before Giffard, S. G., 6th May, 1876).

In the case of Abel's application, No. 1908, 1876, opposed by De Muller, 2nd August, 1876, Giffard, S. G., held that he could not take any official notice of alleged fraudulent proceedings on the part of the foreign communicator of Abel's invention as against the opponent, which took place abroad. He could not look behind the applicant Abel, who, as the first importer or introducer of the invention into Her Majesty's realm, was in law the inventor.

The Law Officers in the case of cross oppositions, one being before each of them, will sometimes sit together to hear them. This was done by *Holker*, A. G., and Giffard, S. G., in the cases of Aulagnier's application, No. 2578, 1876, and Herzog's application, No. 3285, 1876, heard 6th Dec., 1876.

The Law Officers have power to grant costs under Sect. 14, 15, & 16, Vict. c. 83, and this power is frequently exercised, although, as the costs are in the absolute discretion of the Law Officer, it does not necessarily follow that he will order them to be paid.

Oppositions before the Lord Chancellor.—The practice as to entering oppositions at this stage is regulated by the order of Lord St. Leonards of the 15th October, 1852, which is as follows: "Every application to the Lord Chancellor against or in relation to the sealing

of Letters Patent shall be by notice, and such notice shall be left at the Commissioners' office and shall contain particulars in writing of the objections to the sealing of such Letters Patent." It is not necessary to obtain leave to enter an opposition before giving notice of the objections. (Re Vincent's Patent, L. R. 2 Ch. 342.)

The proceedings were formerly on the common law side of the Court of Chancery, of which the Lord Chancellor was the sole judge, and his jurisdiction in relation to Letters Patent was expressly excepted from the Act constituting the Court of Appeal in Chancery (14 and 15 Vict. cap. 13, s. 83). This jurisdiction is still reserved to him by the Judicature Acts.

The onus of proof lies on the opponent. Ex parte Sheffield (L. R. 8 Ch. 237). The evidence is taken by affidavits, not by statutory declarations, and the parties must either conduct their cases in person or be represented by solicitors and counsel. Diligence must be used in prosecuting a case of opposition; thus, where an opponent only filed affidavits on the morning of the day appointed for the hearing, the Lord Chancellor refused to read them, and ordered the patent to be sealed. (Re McKean's Patent, 1 De G. F. and J. 2.) It would seem that there is no jurisdiction to order cross examination on the affidavits before an examiner, but on the hearing before the Lord Chancellor witnesses may be examined vivâ voce. (Re Gething, L. R. 9 Ch. 633.) When the opponent is out of the jurisdiction, service of the petition for the Great Seal may by leave be made on his solicitor. (Re Campbell's Patent, 22 L. T. o. s. 93.)

The decisions as to the right of a person, who did not enter an opposition before the Law Officer, to oppose the sealing of a patent before the Lord Chancellor, have not been uniform. The practice was allowed in the cases of Ex parte Henson v. Alcock (1 Web. P. C. 432); Re Cutler's Patent (1 Web. P. C. 418); Re Fawcett's Patent (2 De G. M. and G. 439); Re Brennand's Patent (3 De G. F. and J. 695); Ex parte Yates (L. R. 5 Ch. 1); whilst it was not permitted in Re Mitchell's Patent (L. R. 2 Ch. 343); and in the last reported case, Ex parte Manceaux (L. R. 5 Ch. 518), Lord Hatherley, C., said that opposition at this stage was an indulgence to the opponent, who would in future be obliged to pay the costs of the hearing, unless there had been fraud on the part of the petitioner.

The Lord Chancellor has full jurisdiction at the last moment to affix, or to refuse to affix, the Great Seal (Re Cutler's Patent, 1 Web. P. C. 420), all his powers in this respect being expressly reserved by the 15th section of the Patent Law Amendment Act, 1852.

Where there has been no opposition before the Law Officer, the Lord Chancellor will not enter into the merits of the case, but will refer the matter back to the Law Officer. (Re Fawcett's Patent, 2 De G. M. and G.; Ex parte Yates, L. R. 5 Ch. 1; Ex parte Manceaux, L. R. 5 Ch. 518.) And when the opposition is based on the existence of a previous patent for the same invention, the reference will be to ascertain whether, having regard to the prior patent, the seal ought to be affixed to the patent applied for. (Ex parte Yates, L. R. 5 Ch. 1; Ex parte Manceaux, L. R. 5 Ch. 518.)

But where the matter has been before the Law Officer and he has given his decision, an appeal will not be allowed, unless a case of surprise or fraud can be made, or unless some material fact which, if brought before the Law Officer, would have led him to decide differently, has come subsequently to the knowledge of the party appealing. (Re Vincent's Patent, L. R. 2 Ch. 341; Re Simson's Patent, 21 L. T. o. s. 81; Ex

parte Sheffield, L. R. 8 Ch. 237.) Nor will the opponent be allowed to raise on those facts before the Lord Chancellor a new argument which he omitted to raise before the Law Officer. (Ex parte Sheffield, L. R. 8 Ch. 237.)

After the matter has once been before the Law Officer, the Lord Chancellor will not refer it back to him, but will himself decide on the evidence; the question then being (according to Lord Cottenham, C., in the case of Simpson and Isaacs' Patent, 21 L. T. o. s. 81) not whether the petitioner has made out that he is the true inventor, and that the invention is new, but whether such a primâ facie case has been made out that the Lord Chancellor ought to put him into a position to litigate the question with the public. And in Re Russell's Patent (2 De G. and J. 130), where the novelty of the invention was contested, Lord Cranworth, C., thought that in such a case it was better to run the risk of putting the party opposing to the costs of ulterior proceedings than to withhold the Great Seal from the patent, for the obvious reason that the one course would create a remediable, and the other an irremediable injury. (See also Re Tolson's Patent, 6 De G. M. and G. 422; In re Lowe's Patent, 25 L. J. Ch. 454; In re Simpson and Isaacs' Patent, 21 L. T. o. s. 81.) And this principle will be also applied where there is a question whether the invention is properly the subject-matter for a patent. (Re Spence's Patent, 3 De G. and J. 523.) But where it is quite clear that the invention had been dedicated to the public by the inventor before applying for a patent, the Great Seal will be refused. (Re Adamson's Patent, 6 De G. M. and G. 420.) The sealing of a patent will not be refused on the ground of alleged want of utility. (Re Cutler's Patent, 1 Web. P. C. 431.)

In cases where there are rival applications for a

patent for the same invention, and there is a conflict of evidence as to priority of discovery, the patent will be awarded to him who is first in a position to seal it. (In re Lowe's Patent, 25 L. J. N. s. 454.)

But where the second applicant has actually procured the Great Seal without having been opposed, he will hold his patent against all the world, and when the first applicant petitions for the Seal, it will either be refused, or if granted, the patent will be dated after that of the second applicant, under the provisions of the 23rd section of the Patent Law Amendment Act, 1852. Thus, in the case of Ex parte Bates and Redgate (L. R. 3 Ch. 577), application was made for a patent on the 2nd October, and a second applicant applied for another patent for the same invention on the 2nd November, and obtained his patent, without having been opposed, on the 12th December. first applicant on the 19th March applied to have his patent sealed, and asked to have it dated as of the 2nd October. This, however, was refused by Lord Hatherley, C., who said, "When one patent actually exists, and is brought to the notice of the Lord Chancellor, a second patent cannot be granted for the same invention." Accordingly he only permitted the first applicant to include in his patent so much of his invention as was not covered by the patent already granted; nor would he allow the first applicant's patent to bear an earlier date than the day of his application for the Great Seal, so that it was dated after the second applicant's patent.

And so, where the Law Officer had reported that part of an invention for which a patent was sought was the subject of an existing patent, the Lord Chancellor ordered that part to be excluded from the new patent. (Ex parte Manceaux, L. R. 6 Ch. 273.)

The principle of these cases is that the Crown will

not grant a second patent in derogation of a former grant, and will not assume, without scire facias, that the first patent is void. See Ex parte Bailey (L. R. 8 Ch. 61) and Ex parte Henry (L. R. 8 Ch. 167, 169).

The rule does not, however, apply where mala fides is present. Thus, where a servant having filed a provisional specification, his master afterwards filed a provisional specification for the same invention, and then a complete specification, and obtained a patent. There was grave suspicion that the master had surreptitiously obtained a knowledge of the servant's invention, and the servant's patent, notwithstanding the existence of the master's patent, was ordered to be sealed and dated as of the day of his application (Ex parte Scott and Young, L. R. 6 Ch. 274). The consequence of this would be that by virtue of the 24th section of the Patent Law Amendment Act, 1852, acts done under the patent first sealed would be an infringement of the patent with an earlier date. (See Saxby v. Hennett, L. R. 8 Ex. 210.)

On the other hand, in Ex parte Bailey (L. R. 8 Ch. 60), where, except that the relation between the parties was not that of master and servant, the facts seem to have been the same as in Ex parte Scott and Young (which, however, does not appear from the report to have been cited), Lord Selborne, C., refused to enter into the question of fraud, and only allowed the patent of the first applicant to be dated as from the day of the application for the Great Seal.

But the principle of Ex parte Bates and Redgate only applies to the case of a grant actually made and sealed; and therefore a second applicant who, with his petition, files a complete specification under the 9th section of the Patent Law Amendment Act, 1852, and thereby becomes entitled for six months to "the like powers, rights, and privileges, as might have been conferred on

him by letters patent duly sealed as of the date of such application," does not acquire the rights of a patentee, so as to prevent a person who had previously applied for a patent for a similar invention from obtaining a patent. (Exparte Henry, L. R. 8 Ch. 167.)

In some instances terms have been imposed upon the petitioner before sealing his patent. Thus, when a master and his foreman had both invented certain improvements, for which the master alone applied for a patent, but was opposed by the foreman on the ground of prior invention by the latter, Lord Cranworth, C., ordered the patent to be vested in trustees for the benefit of both. (Re Russell's Patent, 2 De G. and J. 130.)

If application for the Great Seal be made during the continuance of provisional protection, and, by reason of an opposition, the provisional protection expires before the sealing, the case falls within the saving clause of the 20th section of the Patent Law Amendment Act, 1852, and the Lord Chancellor will order the patent to be sealed, although the petition for the Great Seal was not presented until just before the expiration of the (Ex parte Bailey, L. R. 8 Ch. 60.) the Lord Chancellor will sometimes direct a patent to be sealed, even where the petition for the seal has not been presented until some months after the expiration of provisional protection, if the delay can be explained by reasons sufficiently satisfactory to induce him to do so; but these reasons must be of a very special nature, such as the interposition of a Government Department, on the ground of an apprehended detriment to the public service by the publication of the invention. (Re Mackintosh's Patent, 28 L. T. 280; S. C. 2 Jur. N. s. 1243; and see Re Hersee and Smyth, L. R. 1 Ch. 518.)

When the sealing of a patent is opposed on the

ground that the invention is similar to that comprised in a prior patent, and reference is made to the Law Officer, the opponent will be ordered to pay the costs of the hearing, unless there has been fraud on the part of the applicant. (Exparte Manceaux, L. R. 5 Ch. 518.)

However, where an opponent was not allowed to read his affidavits, on the ground that they were filed too late and the patent was sealed, the Lord Chancellor refused to give costs against the opponent. (Re McKean's Patent, 1 D. F. J. 2.) If the petition for the Great Seal be refused, the petitioner must pay the costs. (Exparte Yates, L. R. 5 Ch. 1; Re Nickel's Patent, Hindmarsh on Patents, 536; 1 Phil. 36.)

When the opposition is not unreasonable, no costs will be given. (Ex parte Fox, 1 V. & B. 67; 1 W. P. C. 431.) But an unsuccessful opponent, who had not opposed before the Law Officer, will be ordered to pay costs. (Ex parte Henson, Re Alcock's Patent, 4 My. & Cr. 511; 1 W. P. C. 432; Re Cutler's Patent, 4 My. & Cr. 510), and the costs of objections filed and afterwards withdrawn, and of a petition rendered necessary by them have been ordered to be paid by the objector. (Re Copley's Patent, 31 L. J. N. S. Ch. 533.)

The Lord Chancellor has power under the twentieth section of the Patent Law Amendment Act, 1852, to order a patent to be sealed although the petition for the Great Seal was not presented until after the expiration of seven months from the date of application. This was decided by Lord Cairns, C., in the case of Johnson's Patent, November, 1878. The delay had unavoidably arisen in this case in the office of the Attorney-General, and the Attorney-General had certified on the petition that the delay had not been occasioned by the neglect or default of the petitioner.

CHAPTER IX.

THE LETTERS PATENT: THEIR DATE, DURATION, AND EXTENT.

THE form in which letters patent are usually issued is given in the Appendix to this volume. On reference thereto, it will be seen that the Crown, with a superabundance of words and formality, grants unto A. B., his executors, administrators, and assigns, especial licence, full power, sole privilege and authority, that he, the said A. B., his executors, &c., from time to time, and at all times thereafter during the term of years thereinafter expressed (viz. fourteen years), shall and lawfully may make, use, exercise, and vend his invention within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, in such manner as to the said A. B., his executors, &c., shall in his or their discretion seem meet; and that the said A. B., his executors, &c., shall have and enjoy the whole profit, benefit, commodity, and advantage from time to time coming, growing, accruing, and arising by reason of the said invention, for and during the term of years therein mentioned. Then "all and every person and persons, bodies politic and corporate, and all other our subjects what soever, of what estate, quality, degree, name, or condition soever they be," are strictly commanded not to infringe the patent. It is, however, provided that, if it shall be made to appear to the Crown or the Privy Council that the grant is contrary to law, or prejudicial or inconvenient to the subjects of the realm in general, or that the invention is not a new

invention as to the public use and exercise thereof within the United Kingdom, &c., or that the said A. B. is not the first and true inventor thereof within the realm, the patent shall be void.

There are also other provisoes, the two most important of which are-first, that declaring the grant to be void if the said A. B., his executors or administrators, shall not particularly describe and ascertain the nature of the invention, and in what manner the same is to be performed, by an instrument in writing (to wit, the specification), under his or their hands and seals, and cause the same to be filed in the Great Seal Patent Office within six calendar months next after the date of the letters patent; and second, that which declares the patent to become void at the expiration of three years or seven years, in case the stamp duty of £50 is not paid to the Commissioners of Patents before the expiration of the third year, and the stamp duty of £100 before the expiration of the seventh year.

The law officer has power, under the fifteenth section of the Patent Law Amendment Act, 1852, to direct all such restrictions, conditions, and provisoes, as he may deem usual and expedient or necessary, in pursuance of the provisions of the Act, to be inserted in the letters patent. Moreover, under the sixteenth section of the same Act, the Crown has power, by warrant under the sign-manual, to direct the law officer to withhold his warrant, or to direct that any letters patent for the issuing whereof he may have issued a warrant, shall not issue, or to direct the insertion in any letters patent of any restrictions, conditions, or provisoes which the Crown may think fit, in addition to, or in sub-

¹ This proviso is modified to meet the case of a complete specification being filed, instead of a provisional specification, along with the petition and declaration. See the Form in the Appendix.

stitution for, any restrictions, conditions, or provisoes which would otherwise be inserted therein under the Act. Of course, these powers will only be exercised on very special occasions.

It is imperative that the patent should be issued during the continuance of the provisional protection, or the protection by reason of a deposit of a complete specification. The only exceptions allowed are firstly, where the application to seal was made in due time, and the sealing was delayed by reason of the delivery of notice of objection, or an application to the Lord Chancellor in relation to the sealing of the patent (15 & 16 Vict. c. 83, s. 20); secondly, where the delay in sealing has arisen from accident, and not from the wilful neglect or default of the applicant (16 & 17 Vict. c. 115, s. 6). The Chancellor, in either case. may extend the time for sealing, but not for longer The practice upon applications to than a month. extend the time is governed by the Chancellor's rule of the 17th July, 1854—for which see the Appendix.

Under very special circumstances, however, the Lord Chancellor may be induced to seal a patent some months after the expiration of the provisional protection. See the case of *Re Mackintosh's Patent*, cited in the chapter on Oppositions.

In the case of the applicant dying during the continuance of protection, whether under a provisional or complete specification, the patent may be issued to the executors or administrators during the continuance of such provisional or other protection, or at any time within three months after the death of the applicant (15 & 16 Vict. c. 83, s. 21). In this case a petition is presented to the Lord Chancellor, setting forth the facts, and requesting his order that the letters patent may issue to the executors or administrators. The petition must be supported by an affidavit verifying its

allegations, and the probate or letters of administration must be produced and registered in the patent office.

Letters patent are usually dated as of the day of the application for the same; but the Lord Chancellor, or the law officer, has power to cause them to bear date as of the day of the sealing, or of any other day between the day of the application or provisional registration, and the day of the sealing (15 & 16 Vict. c. 83, s. 23).

By the 24th section of the same Act any letters patent bearing date as of any date prior to the day of the actual sealing thereof shall be of the same force as if they had been sealed on the day of their date. Patents therefore have priority according to their dates, not according to the time of sealing. patent was applied for by Saxby on the 20th of July, 1867, and when issued it was dated on that day. the 23rd of July, Easterbrook applied for a patent in respect, it was alleged, of the same invention, and the patent when granted bore that date. It appeared that Easterbrook's patent was sealed before Saxby's, though dated three days later, and the former contended that his patent took priority, but the Court of Exchequer held that by the language of the Act priority was determined by the date, not by the time of sealing of (Saxby v. Hennett, L. R. 8 Exch. 210.)

But now the practice is that where two parties apply for patents for similar inventions about the same time, and the second applicant first has the seal affixed, the patent of the first applicant will either be refused or it will be dated as of the date of his application for the seal, and therefore later than the patent of the second applicant. (Ex parte Bailey, L. R. 8 Ch. 60; Ex parte Scott and Young, L. R. 6 Ch. 274; Ex parte Harrison, L. R. 9 Ch. 632; Bates & Redgate's

Case, L. R. 4 Ch. 577.) See further on this subject in the chapter on Oppositions.

The term for which patents may be granted is limited by the statute of James to fourteen years, and it is usual to make the grant for the whole of this term. The time runs from the day of the date of the patent, including that day; for instance, a patent for fourteen years, dated 26th February, 1825, was held to expire at twelve o'clock on the night of the 25th February, 1839. (Russell v. Ledsam, 14 M. & W. 574.)

With regard to letters patent obtained in the United Kingdom for foreign inventions patented abroad, the 25th section of the Act of 1852 declares that they shall expire (whatever may be the term limited in such letters patent) at the expiration of the term during which the patent obtained abroad shall continue in force, or in case of several foreign patents at the expiration of the first. This section will apply to a British patent only so far as the inventions in that and the foreign patent are identical, and if the British patent covers more ground than the foreign patent, then the former will remain valid pro tanto. effect of the section" (said Wood, V.C., in Daw v. Eley, L. R. 3 Eq. 496) "is to strike out of the English patent that which up to a certain time the foreign patent has covered, but ceases any longer to cover."

This section, however, will not render a British patent void on the determination of the foreign patent when the latter is obtained between the date of the application for the British patent and the date of its sealing; for the 24th section of the same Act provides that any letters patent "sealed and bearing date as of any day prior to the day of the actual sealing thereof, shall be of the same force and validity as if they had been sealed on the day as of which the same are ex-

pressed to be sealed and bear date." That is to say, letters patent are to be taken as if sealed on the date which they bear, and it is usual to date them on the day of the application, not on the day of the sealing. Thus, where a patent for a foreign invention was applied for in this country on the 17th of September, and the patent was sealed on the 17th of December, but dated the 17th of September, the determination of a foreign patent for the same invention obtained on the 13th of December was held both by the Master of the Rolls, and, on appeal, by the Lords Justices, not to affect the validity of the British patent. (Holste v. Robinson, L. R. 4 Ch. D. 9.)

In case clerical errors should have been made in letters patent, the Master of the Rolls has power to correct them. (Re Nickels' Patent, 4 Bea. 563); but the application must be made within a reasonable time. (Re Blamond's Patent, 3 L. T. N. S. 800.)

The Patent Law Amendment Act, 1852, introduced new regulations as to the payment of fees and stampduties in respect of letters patent; and instead of retaining the old plan of making the whole expenses pavable at the time of taking out the patent, the burden of them is now postponed to the eve of the expiration of the third and the seventh years after the date of the patent. This is a convenient arrangement for patentees, who, in place of paying a heavy sum for what may turn out an unremunerating invention, have now an opportunity of practically testing its commercial value before the heaviest part of the expense is In order to insure payment of the postponed sums, the statute 16 Vict. c. 5, s. 2, enacts that all letters patent shall be made subject to the condition that the same shall be void at the expiration of three years and seven years, respectively, from the date thereof, unless there be paid, before the expiration of the said periods, the stamp-duties mentioned in the schedule of the Act; and we have seen that such a clause is accordingly inserted in letters patent.

It is a sufficient compliance with the statute if the duty is paid on the third anniversary of the date. Thus, where letters patent were dated on the 26th February, 1855, and the three years' stamp-duty was paid on the 26th February, 1858, it was held to have been paid in due time (Williams v. Nash, 28 Beav. 93).

Where through inadvertence the stamp-duty has not been paid, and the patent has consequently become void, a special Act of Parliament can usually be obtained to make the patent valid.

It was formerly the practice to issue separate letters patent for the three kingdoms, upon three separate applications of the inventor; but now, by the Act of 1852 (s. 18), it is provided that letters patent shall extend to the whole of Great Britain and Ireland, the Channel Islands, and the Isle of Man; and, in case the Queen's warrant shall so direct, such letters patent shall be made applicable to our colonies, or such of them as shall be mentioned in the warrant. The letters patent thus granted are declared to be as valid and effectual throughout all the territories just mentioned, as the letters patent formerly granted were separately valid in the three kingdoms respectively. The Commissioners of Patents have, for some time past, refused to extend the grants to the colonies; and most of our colonies have acquired patent laws of their own.

In case of the destruction or loss of letters patent, others of the like tenor and effect, and sealed and dated the same day, may be issued under the authority of the warrant in pursuance of which the original letters patent were issued (15 & 16 Vict. c. 83, s. 22). The practice is to present a petition to the Lord

Chancellor, setting forth the facts, accompanied by an affidavit in support. The duplicate letters patent are impressed with a stamp of £5.

By the 22nd Vict. c. 16, the Secretary of State for War is empowered to acquire by purchase or gift, the benefit of any inventions of improvements in munitions of war, and of any letters patent obtained for the same, and to prevent the disclosure of such inventions. (See the statute at length in the Appendix.)

The Court of Queen's Bench decided in the case of Feather v. The Queen (6 B. & S. 257) that letters patent in the form in which they are usually issued, are not valid as against the Crown, and that the Crown is entitled, notwithstanding the grant, to use the invention without the assent of the patentee (see the case more fully stated in the chapter on Infringements); but manufacturers manufacturing for the Crown are not in the same position (See Dizon v. The Small Arms Company, Limited, L. R. 1 App. Ca. 632).

As to the mode of applying for a prolongation of letters patent, and the principles which guide the Privy Council in deciding upon the application, we must refer the reader to a subsequent chapter.

CHAPTER X.

DISCLAIMERS.

It has been already shown that a patent which includes two inventions, of which one is not new or not useful. is altogether invalid; and that if the patent is confined to a single invention, any material part of which has either of these defects, the patent is likewise in-The fatal effect of an inconsistency between the title and the specification has also been pointed out. To remedy a law which in very many cases bore unjustly upon patentees, a clause was introduced into the Act 5 & 6 Wm. IV. c. 83, by which a patentee is empowered (by leave of the Attorney or Solicitor-General, in case of an English patent; or of the Lord Advocate or the Solicitor-General for Scotland, in case of a Scotch patent; or of the Attorney or Solicitor-General for Ireland, in case of an Irish patent, certified by his fiat and signature), to enter a disclaimer of either the title of the invention or of the specification, stating the reason for such disclaimer; or with the like leave to enter a memorandum of any alteration in the title or specification (not being such disclaimer or alteration as shall extend the exclusive right granted by the said letters patent); and such disclaimer or memorandum being filed with the specification, is then to be deemed part of the letters patent, or of the specification, in all courts. It is, however, expressly provided that the disclaimer, or memorandum of alteration, shall not be receivable in evidence in any

action or suit pending at the time it was filed, except in a proceeding by scire facias.

The effect of this clause has been to check the bringing of the action of scire facias to repeal patents, except where the vice complained of goes to the essence of the invention, and to every part of it. The patentee being enabled not only to amend the title and specification by disclaimer, but to put his disclaimer in evidence at the trial, it may be that the prosecutor's case will be altogether cut away from him. In such event he may be called upon to pay the patentee's costs, the payment of such costs being the condition of the bond given by him at the commencement of the suit, in case the patent shall not be cancelled by means of the writ of scire facias, or proceedings thereunder. Leave to put the bond in suit must, however, be first obtained from the Master of the Rolls or the Attorney-General; and neither functionary is likely to grant such leave, when the prosecutor stayed his proceedings as soon as he received notice of the disclaimer by which the invalidity of a patent was cured. See what fell from the judges in The Queen v. Mill (10 C. B. 379).

By the 39th section of the Patent Law Amendment Act, 1852, the provisions of the 5 & 6 Wm. IV. c. 83, and of 7 & 8 Vict. c. 69, as to disclaimers and memoranda of alteration are directed to apply to patents under that Act. The same section declares that no action shall be brought upon any letters patent which, or the specification of which, has been altered by disclaimer or memorandum, in respect of any infringement committed prior to the filing of the disclaimer or memorandum, without the express permission of the law officer. It is further declared, that the filing of any disclaimer or memorandum of alteration, in pursuance of the law officer's leave, shall, except in

cases of fraud, be conclusive as to the right of the party to enter such disclaimer and memorandum.

The judges of the Court of Queen's Bench having decided, in the case of Holmes v. London and North-Western Railway Company, that a patent for an improved turn-table for railway purposes was invalid, because the patentee had not limited his claims to the combination of the parts of the machine, but had described, and was therefore considered to have claimed. the several parts, some of which were old, the assignee of the patent applied to the Solicitor-General for leave to enter a disclaimer of the separate parts of the turntable, so as to confine the claim of invention to the combination of parts forming the whole apparatus. The Solicitor-General (1853), after hearing counsel in opposition, as well as for the applicant, granted the leave sought for, upon the terms of the applicant undertaking not to bring or prosecute any action or suit against certain parties, in respect of any turn-tables made or used by them before the date of the disclaimer (Macr. P. C. 31). See also in the matter of Smith's Patent (Macr. P. C. 232).

The principle of the above cases received considerable extension in Re Medlock's Patent, the facts of which are stated in an article in Newton's Lond. Jour. vol. This was an application for leave to enter 22, n. s. 69. a disclaimer of part of a specification under a patent for preparing a red or purple dye by treating aniline with dry arsenic acid. The patent had been the subject of considerable litigation, which had resulted in its being declared invalid on the ground that two alternative processes were described in the specification, of which confessedly only one would answer. (See Simpson v. Holliday, 13 W. R. 577, cited ante, The application was opposed by several chemical manufacturers, some of whom had been made defendants in the various suits instituted by the owners of the patent. After hearing counsel on both sides, Collier, S. G., granted the leave sought for, but only on the terms that the applicants should bring no action against the opposers "for any infringement of the patent by the use, or continued use, during the continuance of the patent, of any processes for manufacturing red and purple dyes in use by them at the present time." The applicants refused to accept this condition, and the Solicitor-General consequently disallowed the disclaimer.

In Re Tranter's Patent of 1865, which was a patent for firearms and cartridges, an application was made in August, 1873, by the assignees of the patent for leave to disclaim certain portions of the matters claimed in the specification, and the application was opposed by manufacturers of firearms and cartridges chiefly on the ground that they had embarked large capital in the manufacture of cartridges, and that they should be protected in their manufacture against any proceedings on the part of proprietors of a patent which had been allowed to remain in its imperfect state for such a long time, inasmuch as the effect of the disclaimer would be to enable the applicants to take such proceedings. The A. G., Coleridge, granted the leave sought for, but only on the condition that the applicants "should undertake that no legal proceedings be taken against the opponents in respect of the manufacture, use, or sale of cartridges, or for any alleged infringement of the patent in question when amended by disclaimer." And this decision was followed by Giffard, S. G., in the case of Re Jones's Patent, on the application of Mr. Battley, the assignee, for similar leave.

The law officer, however, will not always insist upon the patentee giving an undertaking of this nature. He may think it right that the past infringement of the patent should be paid for (Re Lucas's Patent, Macr. P. C. 234). But a patentee disclaiming after he has obtained an injunction against an infringement cannot enforce the injunction after disclaimer, but must proceed de novo. (See Dudgeon v. Thomson, L. R. 3 A. C. 34.)

In the matter of Bateman and Moore's Patent (Macr. P. C. 116), an application was made (1854) to Bethell, S. G., for leave to alter the specification, so as to make it disclaim the separate parts of the invention, and claim only the combination. The Solicitor-General said, that he should require to see from the specification itself that it had not been intended to claim the separate parts, but their combination only. Finding some indication of an intention to claim the apparatus as a whole, he gave the patentees permission to reject certain words in the claiming part of the specification which were inconsistent with such a construction.

When some distinct and separate part of the invention is clearly old or useless, then there is no difficulty in excising it from the specification by a disclaimer. But where this is not the case, the entry of a disclaimer before a trial at law, is a matter of doubtful policy. In the reported cases of the allowance of disclaimers, trials at law had previously taken place, wherein the difficulties and objections to be obviated had been pointed out.

Every disclaimer which would have the effect of extending the exclusive right granted by the patent will be void by the language of the Act. For example, if the specification showed that the parts were claimed, and not their combination, then a disclaimer which sought to reject the parts, and to insert a claim for the combination alone, would be bad, inasmuch as this would be an attempt to extend the original privileges of the patent. "The object of the Act authorizing disclaimers" (said Lord Westbury in the case of Ralston v. Smith, 11

H. L. C. 223) "was plainly this, that when you have in your specification a sufficient and good description of a useful invention, but that description is imperilled or hazarded by something being annexed to it which is capable of being severed, leaving the original description in its integrity good and sufficient, without the necessity of addition, then you may, by the operation of a disclaimer, lop off the vicious matter, and leave the original invention, as described in the specification, untainted and uninjured by that vicious excess."

The operation of a disclaimer was considered in the case of Seed v. Higgins (8 E. & B. 755). patentee described in his specification, and illustrated by drawings, some machinery for preparing cotton, and after saying that the apparatus so described represented one particular and practicable mode of carrying out the invention, he proceeded to state that he did not intend to confine himself to this particular method, but claimed as his invention the application of the law or principle of centrifugal force for a certain He afterwards disclaimed his claim to the application of the law or principle, except only the application of centrifugal force acting in a certain manner as described in the specification. held to be a limitation of his claim to the particular apparatus described, whereby the principle was applied in a certain way, and afforded no ground for contending that the disclaimer described a different invention from that described in the specification. This view was also taken on appeal by the Court of Exchequer Chamber (8 E. and B. 771) and by the House of Lords (8 H. L. C. 550).

The phraseology of the Act is somewhat indefinite, but the section has been held to apply to all cases where the disclaimer attempts to give the patentee a right which he could not have enjoyed under the specification as originally framed. Thus, in the case of Ralston v. Smith (11 C. B. N. s. 471) it was decided by the Court of Exchequer Chamber, and afterwards by the House of Lords (11 H. L. C. 223) that a disclaimer is bad which is in effect an attempt to turn a specification for an impracticable generality into a grant for a specific process, comprised within the generality in one sense, but not to be discovered there without going through the same course of experiment which led to the discovery of the specific process in the disclaimer. The specification in this case was expressed in general terms, embracing a great number of modes of engraving upon rollers any desired design for the purpose of embossing woven fabrics. afterwards found that only rollers with circular grooves would answer, and the patentee thereupon, by disclaimer, limited his invention to such rollers. "Now" (said Lord Chelmsford) "as these were not specifically described in the original specification, but were merely involved in the general terms which were used, the patentee had not complied with the conditions of the letters patent in particularly describing and ascertaining the nature of his invention. When, therefore, by his disclaimer he confines his claim to circular grooved rollers as his sole invention, though in one sense he may be said to narrow a right, yet he really extends it, because he thereby describes his alleged invention sufficiently to enable him now to assert a right under the patent which he never could have successfully maintained upon the original specification alone."

It seems from the case of *Thomas* v. Welch (L. R. 1 C. P. 192) that all the claims may be struck out by disclaimer, provided that there is enough left in the specification to show clearly what is the invention claimed by the patentee.

By the fifth section of the 7 and 8 Vict. c. 69, the

right to enter a disclaimer, or to amend, is given to an assignee who has acquired the whole interest in the patent. When the patentee has assigned part of his interest only, the patentee and assignee must join in making any disclaimer or alteration.

Under the language of that part of the section which enacts that "no objection shall be made, in any proceeding whatsoever, on the ground that the party making such disclaimer or memorandum of alteration had not such authority in that behalf," it was held that the disclaimer of a patentee who had assigned all his interest in the patent could not be objected to (Wallington v. Dale, 7 Exch. 888). Mere clerical errors may be amended by the order of the Lord Chancellor or Master of the Rolls without the necessity of filing a memorandum of alteration (Re Sharp's Patent, 3 Beav. 245; Re Redmond, 5 Russ. 44; Re Rubery's Patent, 1 W. P. C. 649; Re Dismore, 18 Beav. 538; Re Johnson's Patent, L. R. 5 Ch. D. 503). The Master of the Rolls may order a disclaimer to be removed from the file, when filed without the consent of the patentee (Re Berdan's Patent, L. R. 20 Eq. 346).

The M. R. refused to cancel a memorandum of alteration made under 5 and 6 William IV. c. 83, when application was made to him for that purpose, on the ground that it extended the patentee's privilege, and infringed the petitioner's patent rights, for he held he had no jurisdiction (Re Sharp's Patent, 3 Beav. 245).

The application for leave to enter a disclaimer or memorandum of alteration, must be made at the Patent Commissioner's Office, and it is then referred to the proper law officer. The petition must be impressed with the stamp of £5. Persons having adverse interests may lodge caveats (requiring a £2 stamp) at the office, and they are then entitled to notice when the application is heard by the law officer. Leave

having been obtained, and the law-officer's fiat issued, the disclaimer or memorandum of alteration is simply filed at the office, no enrolling being now required.

There is no appeal from the decision of the law officer granting or refusing leave to file a disclaimer. In the case of Medlock's Patent, cited above (p. 181), the owners of the patent, after the Solicitor-General had refused his fiat, presented a petition to the Commissioners of Patents, submitting that the law officer having once granted his fiat, it could not be recalled, and praying that the disclaimer and fiat might be filed, so that the validity of the conditions imposed might be tried in a court of law, or that the disclaimer might be referred to the Commissioners of Patents, or that the Commissioners would require a fuller statement of the case, and that the petitioners might be heard before The petition was, however, returned, endorsed with the word "refused" (Newton's Lond. Jour. vol. 22. n. s. 70, 71).

The law officer has not the power of awarding to the successful opponent to an application for leave to enter and file a disclaimer the costs of his opposition. This was decided recently by the Queen's Bench division, and affirmed on appeal in the case of Kynock v. The National Small Arms Company, Limited (Law Journal, Notes of Cases, vol. 12, p. 153).

CHAPTER XI.

CONFIRMATION OF LETTERS PATENT.

It sometimes happens that a patentee, who, when he applied for his letters patent, believed himself to be the first and original inventor of that for which he obtained the patent, afterwards discovers that some other person had invented or used the same invention. or part thereof, before the date of his patent, although it had not been publicly and generally used. Previous to the passing of the 5 and 6 Wm. IV. c. 83, such a patentee was in an unfortunate position, for his patent was altogether invalid. But the second section of that Act enacts—(1) that if in any suit or action it shall be proved, or specially found by the jury, that any patentee was not the first inventor of the invention patented, or of some part thereof, by reason of some other person having invented or used the same before the date of the patent, or (2) that if such patentee or his assigns shall discover that some other person had, unknown to such patentee, so invented or used the same, it shall be lawful for such patentee or his assigns to petition the Queen in Council to confirm his patent, or to grant a new patent; and the Judicial Committee of the Privy Council being satisfied that such patentee believed himself to be the first and original inventor, and being satisfied that such invention, or part thereof, had not been publicly and generally used before the date of the patent, may report to the Queen their opinion that the prayer of the petition

ought to be complied with, whereupon the Queen may, if she think fit, grant such prayer. The Act provides that any person opposing such petition is entitled to be heard before the Judicial Committee; and that any person, party to any former suit or action touching such letters patent, is entitled to have notice of such petition before it is presented. The provisions of this Act are made applicable to the patents granted under the Patent Law Amendment Act, 1852. (See sect. 40.)

The statute does not apply to the case of a previous user by the patentee himself; the previous user authorizing an application to the Privy Council must have been that of some other person, and unknown to the patentee at the time he obtained his patent (*Pow's Case*, 2 W. P. C. 5).

In the matter of Stead's Patent (2 W. P. C. 146) it was held that the statute does not apply where the circumstances are such that the validity of the patent is not affected. The case to be remedied is that of a patentee, who had believed himself to be the original inventor, discovering, either after or before action brought, a prior invention so known that the patent might be invalidated on that ground, although not publicly and generally used. The invalidity of the patent being the ground of the application to the Privy Council, the patentee ought not, after presenting his petition, to do anything which is inconsistent with the assumption of its invalidity, such as bringing an action for infringement.

If the petitioner knows the name of the person whose previous use of the patented invention had invalidated it, the name must be mentioned in the petition; and if his name is unknown, the fact must be stated (Re Lamenaude's Patent, 2 W. P. C. 164). The Committee requires some evidence of the patentee's

belief, that at the time he applied for the patent he was the first inventor (*Re Card's Patent*, 2 W. P. C. 161).

The words of the statute are very general, but a discretion is clearly given to the Judicial Committee by the language of the Act; and the following cases will show the principles upon which they have proceeded in their decisions:—

In Honiball's case it was said that the jurisdiction to confirm letters patent should be very cautiously and sparingly exercised (9 Moore, P. C. C. 452).

Baron Heurteloup obtained a patent in 1834 for certain improvements in fire-arms. He subsequently discovered that part of his invention had been embraced by a patent granted in France in 1821, and that there existed a printed book in the British Museum containing a description of the French invention. The petitioner's affidavit, in support of his petition to the Privy Council, stated that he believed himself to be, at the time of the grant, the true and first inventor of the patented improvements; and further, that he believed the French invention had never been brought into use in France or elsewhere, and that it was not known in England, otherwise than by the introduction of books printed in France, containing a description of the invention. Notice of the day of hearing had been sent through the post-office, addressed to the French patentee. Under these circumstances, their lordships reported that the case was a proper one for confirmation (Heurteloup's Patent, 1 W. P. C. 553).

There are other cases which show that the Privy Council will not grant a confirmation where the previous user of the invention, which is alleged to invalidate a patent, and to call for the aid of the statute, continues up to the date of the patent. In order to afford ground for the interposition of the Crown, acting on the recommendation of the Privy Council, it must be shown that the previous user was not only not general, but that it had ceased, and was non-existent at the date of the patent, in which case a confirmation does injury to no one. On an application to confirm Card's Patent for improvements in the manufacture of candle-wicks (2 W. P. C. 161), it appeared that another candle-maker had adopted the same method of making wicks before the date of the patent, and that he and his brother had practised it in different parts of the same country. It appeared, moreover, that one of them, and the assignees of the other, had continued to make wicks in that way up to the time of the hearing The method had been mentioned by of the petition. them to other people, and there was ground for supposing that another candle-maker had adopted it. The Judicial Committee considered that this was not such a case as the legislature had in contemplation when they passed the Act, and they refused the application.

Lamenaude obtained a patent on the 18th of July, 1848, for an invention of a method of fixing letters upon glass without wire or iron. It turned out, that somewhere between the 12th and 15th of the same month of July, some letters had been fixed upon glass by this very method by another person. This was sufficient to vitiate the patent, and an application was made to the Privy Council for a confirmation. It was argued that, although the invention had been publicly used, it had not been generally used previous to the date of the patent, and it was proved that the person who had so used it was a consenting party to the application; but it was held that the statute did not apply to such a case as this, where the invention had already got into use, and was actually in use at the

date of the patent (Lamenaude's Patent, 2 W. P. C. 164).

The Act was held not to apply to a case in which it was proved that two patents had been previously procured for substantially the same invention as that covered by the patent which it was sought to confirm, although the previous patents had expired (Westrupp and Gibbin's Patent, 1 W. P. C. 554).

Application was made for the confirmation of a patent granted in 1838 to Mr. Porter, for an improvement in the construction of anchors. It appeared that, after obtaining the patent, Mr. Porter had called on several anchor-smiths in various parts of the country, for the purpose of introducing his invention to their notice; and that when he called upon Messrs. Logan of Liverpool, they directed his attention to an anchor which they had invented in 1826. The construction of their anchor was similar to that of Porter's, and they had sold a few of that make to various shipowners. Notwithstanding this, Porter continued to work his patent, and when it was about to expire, he applied for and obtained an extension for six years. alleged infringement having taken place, an action was brought by Porter's assignee, and on the trial the facts as to Logan's anchor came out. assignee then applied to the Privy Council for a confirmation of the extended patent; but it was held, that as the evidence showed that not only Porter was not the original inventor, but that he was aware of the fact at the time he applied for an extension, this was not a proper case for the Crown to grant a confirmation, and the application was refused. "It is not easy," said Mr. Pemberton Leigh, on giving judgment, "to define the exact meaning of the expression, 'publicly and generally used' in the Act of Parliament. Their lordships would not consider the use of the invention on board a single ship, however public, or for whatever length of time, as a general user. They were satisfied that the invention had not been publicly used at the date of the original letters patent. Although Porter believed himself to have been the original inventor at the time when the original patent was taken out, it was clear that he could not think so at the time of the extension. Seeing that he was not the original inventor, the patent ought never to have been granted, and the prayer for extension should not have been listened to "(Honiball's Patent, 3 Eq. Rep. 225; S. C. 2 W. P. C. 201).

CHAPTER XII.

EXTENSION OR PROLONGATION OF LETTERS PATENT.

Notwithstanding the merit and utility of his invention. a patentee sometimes finds himself nearly at the expiration of the term for which his patent was granted. without having reaped the reward which he was fairly entitled to expect. This may have happened from various causes. To perfect the invention, to work it out, and to bring it before the public, may have been attended with great expenses, which were never re-It sometimes occurs that the public are slow to acknowledge the merit of an invention of real value. and the patentee's privilege is on the point of expiring before they can be brought to extend their patronage It may be that the patentee's monopoly has been infringed, and that large costs have been incurred in enforcing or defending his just rights. Or it may be that the patentee did not himself possess the means. and was never fortunate enough to meet with a capitalist to advance what was necessary to work the in-From some one of these causes, or from vention. several of them combined, it occurs frequently that a patentee fails to derive any benefit, even if he escapes loss, from an invention of sterling merit and utility. Previous to the passing of the statute 5 & 6 Wm. IV. c. 83, there was no mode of obtaining the extension of a patent privilege except by an Act of Parliament. which was attended with considerable cost. much less expensive mode was provided by the fourth section of that Act, namely, by petition to the Queen in Council; and her Majesty was empowered, after report from the Judicial Committee, to grant new letters patent, for a term not exceeding seven years after the expiration of the first term. In case the patentee believes that a further term of seven years will not suffice for his reimbursement and remuneration, then he may proceed, under the second section of the 7 & 8 Vict. c. 69, and apply for a longer period of extension, which cannot, however, exceed fourteen The benefit of these enactments is extended, by the fourth section of 7 & 8 Vict. c. 69, to the assignee of a patentee; and the provisions of these Acts, and of the Act 2 & 3 Vict. c. 67 (to be noticed hereafter), are extended to patents granted under the Patent Law Amendment Act, 1852, by the fortieth section of that Act, and the seventh section of 15 & 16 Vict. c. 115.

An assignee is allowed to apply for an extension, but he does not stand altogether in the same favourable position as the patentee. It is chiefly with the view of rewarding a meritorious inventor that the extension of a patent is granted. If, however, the assignee be a person who has assisted the inventor with funds to enable him to perfect the invention and bring it into use, this will be looked at by the Privy Council as a favourable feature in a petitioning assignee's case (Norton's Patent, 1 Moore, P. C. C. N. s. 339), in which case the petitioners, who were a public company, were refused a prolongation which they applied for after the death of the inventor. See also the case of Napier's Patent (13 Moore, P. C. C. 543). Pitman's Patent (8 Moo. P. C. C. N. s. 297). Normand's Patent (L. R. 3 P. C. C. 193).

The proceedings commence by the insertion of advertisements in the public prints, giving notice of the patentee's intention to apply for a prolongation of his

patent, and a petition setting forth the facts must them be presented to her Majesty in Council. Any person is entitled to enter a caveat, and to be heard in opposition when the case is entered upon before the Judicial Committee of the Privy Council (Lowe's Patent, 8 Moore, 1 P. C. C). Not more than two barristers will be heard on each side; that is to say, two in support of the applicant's case, and two in opposition. Where, however, more parties than one oppose, and they have separate and independent grounds of opposition, each will be allowed two counsel.

All facts material to the petitioner's title must be stated in the petition (Johnson's Patent, L. R. 4P. C. C. 83). In one case when such facts were omitted the hearing was postponed, and the petition directed to be amended (Hutchison's Patent, 14 Moore, P. C. C. 364). In another case where important facts were not set forth the application was refused (Pitman's Patent, 8 Moore, P. C. C. N. S. 293).

The petitioner must be prepared at the hearing with evidence to show that there is an invention; that the invention possesses utility and is a benefit to the public; that all reasonable means had been taken to make the invention productive; and if his case is that he has never been reimbursed his expenses, he must give reasonable evidence of the amount of his loss. If, however, there is a balance of profit, but to an extent incommensurate with his fair expectations, he will be required to show what the real profit has been. "It is the duty of a patentee to take upon himself the onus of satisfying the Committee in a manner which admits of no controversy of what has been the amount of remuneration which in every point

¹ As to the right of an alien living abroad to be heard in opposition to a prolongation of Letters Patent, see "Schlumberger's Patent" (9 Moore, P. C. C. 1).

of view the invention has brought to him, in order that their lordships may be able to come to a conclusion whether that remuneration may fairly be considered a sufficient reward for his invention or not. It is not for the Committee to send back the accounts for further particulars, nor to dissect the accounts for the purpose of surmising what may be their real outcome if they were differently cast; it is for the applicant to bring his accounts before the Committee in a shape which will leave no doubt as to what the remuneration has been that he has received." (Per Lord Cairns in Re Saxby's Patent, L. R. 3 P. C. 292; S. C. 7 Moore, P. C. C. N. S. 85. See also Re Clark's Patent, L. R. 3 P. C. C. 421; S. C. 7 Moore, P. C. C. N. S. 255; Wield's Patent, L. R. 4 P. C. C. 89.) The accounts must, therefore, be clear, unreserved, and properly proved (Hills' Patent, 1 Moore, P. C. C. N. s. 258). The profit, year by year, must be shown (Perkins' Patent, 2 W. P. C. 6). If books of account are not forthcoming, the petitioner will be required to explain their absence (Markwick's Patent, 13 Moore, P. C. C. 310). If a patentee so deals with his rights that he is unable to show what amount of profit has been made by working the patent, he will be considered to have disentitled himself to an extension (Trotman's Patent, L. R. 1 P. C. 118). In taking an account of the profits and loss, the patentee is entitled to charge for personal expenses and loss of time in endeavouring to bring the invention into use (Trotman's Patent, L. R. 1 P. C. 135; Newton's Patent, 14 Moore, P. C. C. 156; Perkins' Patent, 1 W. P. C. 6; Carr's Patent, L. R. 4 P. C. 541; S. C. 9 Moore, P. C. C. N. s. 379). And the cost of making experiments has been allowed (Kay's Patent, 1 W. P. C. 572). Law expenses incurred by the patentee in maintaining his rights are in general allowed in deduction of profits, but this will not be

done when the patentee has compromised suits and given up costs to which he had an apparent title (Hills' Patent, 1 Moore, P. C. C. N. S. 258). Where the statement of the accounts is unsatisfactory, the Committee will either direct that question to be taken before considering the merits of the invention, or adjudicate without reference to them (Clark's Patent, L. R. 3 P. C. 421; S. C. 7 Moore, P. C. C. N. S. 255; Wield's Patent, L. R. 4 P. C. 89; S. C. 8 Moore, P. C. C. N. S. 300). But where the accounts are satisfactory on their face the usual course is to go into the question of merits first (Houghton's Patent, L. R. 3 P. C. 462).

If the invention has not been brought into use, that circumstance which will be taken as presumptive of inutility must be explained; and the petitioner must show that the parties interested had done all in their power to bring the invention into public use (Woodcroft's Patent, 2 W. P. C. 29; Bakewell's Patent, 15 Moore, P. C. C. 385; Herbert's Patent, L. R. 1 P. C. 399; S. C. 4 Moore, P. C. C. N. S. 300; Allan's Patent, L. R. 1 P. C. 507; S. C. 4 Moore, P. C. C. N. S. 443).

Delay for a prolonged period on the part of an inventor in attempting to bring his invention into use is a good reason for refusing to grant an extension unless some reasonable excuse can be shown (*Norton's Patent*, 1 Moore, P. C. C. N. S. 339).

It is open to those who oppose the patentee's application, to go into evidence for the purpose of showing that the invention is wanting in novelty or utility, or that it is imperfect; and they may likewise point out defects in the specification.

The fact of improvements having been made by other persons in the patentee's invention after the date of his patent, does not afford ground of opposition to an application for an extension, if the invention has a merit of its own, and if the patentee has not reaped a benefit in proportion to that merit (Galloway's Patent, 1 W. P. C. 727). Where a patent seems deserving of prolongation only in respect of one head of invention out of several, the prolongation will be granted solely with reference to that head (Bodmer's Patent, 8 Moore, P. C. C. 282; Lee's Patent, 10 Moore, P. C. C. 226).

Where the ground of opposition to a patentee's application is frivolous, costs have been awarded to him. On the other hand, if a successful opposer has conducted his case in a proper manner, he may obtain his costs (Honiball's Patent, 9 Moore, P. C. C. 394; Johnson's Patent, L. R. 4 P. C. 75; Hills' Patent, 1 Moore, P. C. C. N. S. 271; Wield's Patent, L. R. 4 P. C. 89; S. C. 8 Moore, P. C. C. N. S. 300). Costs of opposition have been given against a petitioner who abandoned his application (Mackintosh's Patent, 1 W. P. C. 739; Milner's Patent, 9 Moore, P. C. C. 39).

The second section of 2 & 3 Vict. c. 67, directs that the petition for an extension of letters patent shall be presented at least six calendar months before the expiration of the original term. If the petition shall not have been prosecuted with effect before the expiration of that term, from other causes than the neglect or default of the petitioner, the committee of the Privy Council is empowered to entertain the application, and to report thereon, although the original term may have expired before the hearing of the application. But sufficient reason must be shown to the satisfaction of the committee for the omission to prosecute with effect the application before the expiration of the original term. The new letters patent bear date the day after the expiration of the original term. If any one should use the invention in the interval between the expiration of the original term and the grant of the new patent, he is not liable for an infringement. Moreover, those who may have invested capital in working it during that interval may attend before the committee, and oppose the application, or prefer a claim to have their acts protected, and their expenditure made good (Russell v. Ledsam, 14 M. and W. 574).

If litigation, involving the question of the validity of the patent, should be going on at the time of the application for a prolongation, the committee will not go into the question, but will assume the patent to be valid (Bett's Patent, 1 Moore, P. C. C. N. s. 49); unless the invalidity is beyond all reasonable doubt, in which case they will not grant an extension (Woodcroft's Patent, 2 W. P. C. 30; Hills' Patent, 1 Moore, P. C. C. N. s. 258; McInnes Patent, L. R. 2 P. C. 54; S. C. 5 Moore, P. C. C. N. s. 72). If a competent tribunal should, after the grant of a new patent, decide that the original patent was invalid, the new patent will share its fate, and will be invalid likewise (Kay's Patent, 1 W. P. C. 571). On the hearing of the application to extend the term of Honiball's Patent (3 Eq. Rep. 230; S. C. 2 W. P. C. 208), it was said that the grant of an extended term is to be considered as a new grant by new letters patent, subject to the same conditions, open to the same objections, and in ordinary cases entitled to the same advantages, as the original grant. So that in point of fact, the extension decides nothing, one way or other, as to the validity of the And therefore, where it is only a matter of doubt as to the validity of the patent,—as, for example, where the evidence is conflicting,—the extension will be granted, if there appear good grounds aliunds for that course. When it appeared that a patentee had agreed by deed with a public company to grant an exclusive licence, and also covenanted with them to

obtain at the expiration of the term a prolongation of the patent for the same purpose, the application for a prolongation was refused by the Privy Council on the ground that the agreement was contrary to public policy, and repugnant to the spirit of the statute 5 & 6 Wm. IV. c. 83 (Cardwell's Patent, 10 Moore, P. C. C. 488).

In the case of a patent obtained for an invention imported from abroad, which invention had been patented in a foreign country, application was made to the Privy Council for an extension after the expiration of the foreign patent; but it was held that the application could not be entertained, inasmuch as an extension of the British patent would be invalid, by virtue of the twenty-fifth section of 15 & 16 Vict. c. 83, and the seventh section of 16 & 17 Vict. c. 113 (Aube's Patent, 9 Moore, P. C. C. 43; Poole's Patent, L. R. 1 P. C. 514).

The policy of these enactments is to prevent in the case of inventions made and patented in a foreign country the continuance of a monopoly in this country by virtue of any patent subsequently granted here beyond the time when the discovery shall have become public property in the foreign country, and this policy will guide the Judicial Committee in the exercise of their discretion even when the case does not fall strictly within the Act; as, for instance, when the patent sought to be prolonged was granted before the Act was passed, and a foreign patent, which would shortly expire, had been granted before the date of the English patent (Hills' Patent, 1 Moore, P. C. C. N. S. 258).

But these sections do not apply to a patent first granted in the United Kingdom (Re Betts' Patent, 1 Moore, P. C. C. 49; Poole's Patent, L. R. 1 P. C. 514; S. C. 9 Moore, P. C. C. N. S. 452; Johnson's Patent, L. R. 4 P. C. 75; S. C. 8 Moore, P. C. C. N. S. 287; Winan's Patent, L. R. 4 P. C. 93), except in those

cases where the foreign patent is dated only a short time after the British patent. To grant a prolongation in such cases would be acting contrary to the spirit of the Act (Newton's Patent, 14 Moore, P. C. C. 156; Normand's Patent, L. R. 3 P. C. 193; S. C. 6 Moore, P. C. C. N. S. 477; Blake's Patent, L. R. 4 P. C. 535; S. C. 9 Moore, P. C. C. N. S. 373).

Patentees applied for a prolongation of their patent, and obtained a recommendation from the Judicial Committee of the Privy Council, upon which an order was drawn up for a prolongation. A petition was afterwards presented to the Crown, seeking to revoke this order, and this being referred to the Judicial Committee, it was held that this committee has authority, under 3 & 4 Wm. IV. c. 4, s. 4, to entertain such a petition, and to recall the warrant for sealing the letters patent. The Crown can at any time before the Great Seal is affixed countermand the warrant for sealing, upon a proper case being made out (Schlumberger's Patent, 9 Moore, P. C. C. 1).

When a prolongation of a patent term has once been granted, the jurisdiction of the Judicial Committee is exhausted, and they have no power to entertain an application for a further extension (Goucher's Patent, 2 Moore, P. C. C. N. S. 532).

The jurisdiction conferred upon the Judicial Committee by the legislature being an extraordinary one, is to be exercised, as remarked in the Council Chamber, only on the most special grounds alleged and proved in reference to each case, and at the discretion of the Committee; for the extension of a patent is a matter of favour not of right. In coming to a decision, they seek to meet the justice of the case with respect to the adequacy or inadequacy of the patentee's remuneration, regard being had to the patentee's opportunities and his general management of the matter. If he has

met with loss, as the total result of his transactions under the patent, and there has been no neglect or gross mismanagement on his part, there is good primâ facie ground for an extension; but if a certain amount of profit has been derived from working the patent, a decision is less easily formed. The question to be considered, it has been said, is not simply what the patentee has received, but what the patent has gained or what it ought to have gained with proper management. in a case where the patentee did not himself manufacture or sell, but granted licences and received royalties, the accounts of his own expenditure being unsatisfactory and no accounts given of the profits by the licensees, a prolongation was refused on the double ground of the unsatisfactory accounts of the patentee, and that he had so dealt with his patent rights as to deprive himself of the power of showing the amount of profit derived from working the patent (Trotman's Patent, L. R. 1 P. C. 118; S. C. 3 Moore, P. C. C. N. s. 488). Assuming that the patentee's conduct in regard to this part of the case is not open to remark, it is obvious that the merit of the invention is now an element to be considered, since £100 may very well reward an invention of small utility, whilst £10,000 may be an inadequate payment for a discovery of great public benefit, the working of which has been attended with heavy losses and extraordinary anxieties. The amount of inventive power will be taken into consideration, as well as the more or less time and trouble expended by the inventor in making experiments, either previous to his discovery, or in testing it, or in carrying it out. Inventors have different degrees of meritoriousness. It is not, however, to be assumed, that because the step in improvements taken by an inventor is small, his merit is likewise small, and his invention unimportant. A very small addition or alteration may have altogether escaped notice, until

seized and turned to account by an acute mind, and its adoption may lead to most important consequences in the manufacture with which it is connected. reward of such an invention ought not to be made proportionate to its apparent insignificance. justice dictates that the benefit an inventor has conferred on the public ought to be regarded; and the advisers of the Crown, acting under this idea, will give him the opportunity of reaping a recompense in some degree commensurate with the value of the result. delivering judgment on an application to the Privy Council for an extension of Soames' Patent (1 W. P. C. 729), Lord Brougham used these words: "The whole history of science, from the greatest discoveries down to the most unimportant—from the discovery of the system of gravitation itself, and the fractional calculus itself, down to the most trifling step that has ever been made—is one continued illustration of the slow progress by which the human mind makes its advance It is hardly perceptible, so little has in discovery. been made by any one step in advance of the former state of things, because generally you find that just before there was something very nearly the same discovered or invented." His lordship proceeded to say, that in the case of a new principle or a novel invention -for instance, a new process—the smallness of the step did not furnish any argument against its importance. But when a new application only is under consideration, such an application as might easily suggest itself to any person—a new application of a well-known simple process, which had been employed with respect to other substances—then, when a patentee comes to apply for an extension of his patent, the smallness of the step involved in the patented invention will be taken into consideration in determining the length of the extension. In this case, the invention consisted

in an application of mechanical pressure to separate the solid and fluid constituents of cocoa-nut oil. The invention having been of moderate benefit to the public, the moderate extension of three years was granted to the patentee. (See also *Hills' Patent*, 1 Moore, P. C. C. N. s. 258.)

In the case of two cognate patents which had different terms to run, it was ordered that the extensions granted should be such that they should both expire on the same day (Johnson and Atkinson's Patents, L. R. 5 P. C. 87).

We shall proceed to mention a few cases of applications for extension of letters patent, which will illustrate what has been said. On an application for an extension of a patent granted to James Kay, for improved machinery for preparing and spinning flax, it was shown that the patentee had expended £500 in experiments, £500 in obtaining his patent, £2200 in law expenses, and that he had made about £6800 profit. The invention was one of great utility, was used by nearly all the flax-spinners in the kingdom; but looking at the sum already cleared by the patentee, it was thought that a prolongation for three years would satisfy the justice of the case (Kay's Patent, 1 W. P. C. 568).

Richard Roberts obtained a patent for improvements in spinning-jennies, the value of which was so great, that during the last three or four years of the original term, £5000 a year had been made by the patentee. In consequence, however, of piracies, of combinations amongst workpeople, but chiefly of a fire, supposed to have been the act of an incendiary, which destroyed the patentee's premises, and entailed a loss of £10,000 beyond the insurance, the profits did not reach the amount of loss by several thousand pounds. The Committee of the Privy Council, guided

by the ingenuity of the invention, and the peculiar character of the resistance to its introduction, were of opinion that seven years' prolongation was merited (Roberts' Patent, 1 W. P. C. 573).

L. W. Wright applied for an extension of his patent for improvements in bleaching apparatus, and gave evidence before the Committee of his pecuniary embarrassments, and the disputes which had arisen out of his partnership with various persons; which embarrassments and disputes had prevented the introduction of the invention to the trade. He showed that the invention had been successfully practised by several bleachers, but that he had hitherto derived no benefit whatever from it. The Committee reported that it would be proper to prolong the term for seven years (Wright's Patent, 1 W. P. C. 575).

A patent for a new method of preparing iron plates for tinning was granted in 1839 to Thomas Morgan, who, being unable to work the invention, had sold his patent right for £200 to persons who applied, in conjunction with the patentee, for an extension of the term. The assignees had made a profit of about £1000 a year for three years, and the patentee, in addition to the sum received from them, was making about £2 a week out of the patent. The invention appearing to possess only a moderate degree of merit, the Committee thought that the benefit received by the patentee and his assignees was a sufficient reward, and they refused the application (Morgan's Patent, 1 W. P. C. 737).

A patent for printing yarns of any fibrous materials was granted in 1828 to Bennet Woodcroft, who, on the expiration of the original term, applied for an extension. The patented process gave to cloth made of yarn, printed by it, a peculiarly clouded appearance, and the invention gave rise to the manufacture of

clouded silks and fabrics. During the first four years of the patent, £7000 were realized under it. Certain duty, however, was taken off other goods, and from this cause and others a large capital invested in working the patent ceased to be profitable, and the patent right became of small value. At a subsequent time, the invention, under an improved form, was stated to have become of considerable value, and it was thought proper to apply for an extension of the patent. But the Committee, having regard to the amount of profit already realized, and to the fact that the invention, in its improved and valuable form, was introduced from abroad by other persons than the patentee, refused the application.

In 1840, Orlando Jones obtained a patent for improvements in the manufacture of starch. His method consisted in applying a weak solution of caustic alkali to rice. It was shown, at the hearing of an application for an extension of the patent, that the principle of the invention had been discovered by another person prior to the date of Jones' patent, although Jones was not aware of the fact. The invention being thus shown to have no novelty, the application was refused, and costs to the amount of £100 were decreed against the petitioner.

On the application for an extension of Derosne's patent, for improvements in refining sugar, it appeared that the patentee's net profit had been about £3300. But the benefit to the public was so great, being appreciable in every pound of sugar consumed, that an extension of six years was granted (*Derosne's Patent*, 2 W. P. C. 1).

G. F. Muntz applied for an extension of his patent for improvements in the manufacture of sheathing for ship bottoms, and showed that he had made £55,000 by the manufacture during the existence of the patent.

The applicant contended that this sum did not represent his profit as an inventor and patentee, but his profit as a manufacturer. But the Committee of the Privy Council said it was impossible to sever these two heads of profit. It was by means of the patent that he had made the profit. It had given him a monopoly preference; because, as patentee, he was enabled to sell and trade in a manner which, but for his invention and his patent, he could not have done. The application for a prolongation of the patent was refused (Muntz's Patent, 2 W. P. C. 113). (See also Hills' Patent, 1 Moore, P. C. C. N. S. 258; Saxby's Patent, L. R. 3 P. C. 292; S. C. 7 Moore, P. C. C. N. S. 82.)

A. M. Perkins obtained a patent in 1831 for improvements in an apparatus for heating air in buildings, heating fluids, &c. He applied, in 1845, for an extension of the patent, on the ground that he had been inadequately rewarded. The ingenuity of the invention, and its application to a great number of purposes, having been shown, the accounts were investigated; when it appeared that there had been a profit of £15,176 upon gross receipts to the amount of The patentee claimed further to reduce the sum representing his profits, by deducting £500, the cost of experiment, £2700 interest at five per cent. on the average amount of capital employed, and £5400 for an allowance of £400 a year to the patentee for his personal superintendence of the business. sums reduced the profits to £6576 net. sion of five years was granted, the invention being ingenious and useful (2 W. P. C. 7).

An application for the extension of a patent for improvements in the manufacture of steel was opposed on the ground that, whereas the patented process consisted in the addition of carburet of manganese to the crucible, it had been subsequently discovered, that a

better process of making steel was to place carbonaceous matter and manganese separately in the crucible, and this process obtained generally in practice. The Privy Council thought that the merit of the original invention was not thereby materially detracted from, and they granted an extension for seven years. In granting so long a time, the litigation going on in the courts of law was taken into account, as it was thought probable that some time would elapse before the litigation would terminate, and the patentee's representatives have the benefit of the extension granted (Heath's Patent, 2 W. P. C. 257).

Whitehouse, an ingenious mechanic, procured a patent for improvements in the manufacture of iron tubes, which he assigned to his master, Russell, who laid out £14,000 in works to carry out the manufacture. tubes were in great demand, being applicable to a variety of new purposes; but, as the manufacture was simple, many expedients were resorted to to evade the patent, and Mr. Russell was involved in much litigation, in consequence of which, combined with the loss incurred by surreptitious manufacture and sale, his profits were very considerably reduced. On these grounds he applied for a prolongation of the patent, and produced evidence before the committee to show the value and importance of the invention, the losses he had suffered from infringements, and the great reduction that would take place in the value of the premises and machinery (much of which was fitted only for the particular manufacture) if the patent were He further showed that his life had thrown open. been endangered by the anxiety of certain law proceedings. One witness stated that, if the manufacture were thrown open, it would hardly be worth following; the process was so beautifully simple, that it would almost be within the reach of any person of capital. The net profits amounted to about £13,000; but this was shown to be not much greater than the ordinary profits on stock without the protection of a patent. Taking all this into consideration, seeing that the invention was of extraordinary merit, and that Mr. Russell had suffered greatly from the annoyance and anxiety occasioned by the litigation to which he had been subjected, the committee thought the patent ought to be extended for six years, the original patentee receiving £500 a year out of the profits for that time (Whitehouse's Patent, 1 W. P. C. 473).

A patent for forging and shaping small articles in metal was obtained by Mr. Ryder in 1841; when he applied for an extension, he pleaded that though the profits had been £7,000, they had only been made during the last four years. This, however, was held to be no ground for the application in the face of the large sum realized, and the petition was dismissed (Ryder's Patent, Pract. Mech. Jour. vol. vii. p. 238).

It will have been remarked, that the maximum period of extension in these cases was seven years. To induce the Judicial Committee to recommend an extension for fourteen years, a case of the strongest kind must be made out.

In Ruthven's Patent (Pract. Mech. Jour. 2nd series, vol. viii. p. 159), which was a patent for improvements in the propulsion of vessels, the invention was proved to have been of very great merit, and to have failed in being brought into general use through circumstances altogether independent of the will and without the fault of the inventor, who had not merely derived no profit but had suffered considerable loss from his patent. It was shown, moreover, that the Admiralty had then lately instituted experiments with a view to the adoption of the invention, and that several friends of the inventor were willing to embark

large capital in working the invention, should a prolongation be obtained. Evidence was also given that from the nature of the invention it would necessarily be a long time before its merit could be properly brought before the public. Under these circumstances the Judicial Committee (stating that they considered the case exceptional) granted a prolongation for the unusual period of ten years.

Where the invention is one of great merit, and the patentee has assigned his interest in it to another person for a sum which, looking at the profits likely to be derived from working the invention, appears an inadequate consideration, the Privy Council will see that the patentee receives further reward. With this view, a condition is sometimes introduced into the new patent, making it void in case a fixed annual sum, or a certain share in the profits, be not paid to the patentee by the assignee (Whitehouse's Patent, 1 W. P. C. 473; Hardy's Patent, 6 Moore P. C. C. 441). So also where a patentee had mortgaged his patent, and he and his mortgagees asked for a prolongation, it was granted to the patentee alone (Bovill's Patent, 1 Moore, P. C. C. N. s. 348). Again, where the petition had been presented by the patentee and the assignee of a moiety of the patent, and the patentee had died before the hearing, a prolongation was granted on the condition that the assignee should hold one moiety of the new term on trust for the personal representatives of the deceased patentee (Herbert's Patent, L. R. 1 P. C. 399). Other special conditions are sometimes inserted in the new letters patent; for example, that the patented article should be sold to the public at a certain price (Hardy's Patent, 6 Moore P. C. C. 441); that licences should be granted on certain terms (Mallet's Patent, L. R. 1 P. C. 308, S. C., 4 Moore, P. C. C. N. s. 175); or that the Admiralty should have the privilege of using the invention (in this case, an improved propeller for steam and other vessels) without licences from the patentee (Pettit Smith's Patent, 7 Moore, P. C. C. 133). In the cases of Lancaster's Patent (2) Moore, P. C. C. N. s. 189), and Carpenter's Patent (ibid. 191), however, the Judicial Committee refused to insert this latter condition; and it would seem to be now unnecessary since the recent case of Feather v. The Queen (6 B. &. S. 257), where it was held that notwithstanding the grant of letters patent, the Crown has power to use the invention without the assent of the patentee. For instances of other special conditions introduced into the new letters patent, see Bodmer's Patent (8 Moore, P. C. C. 282); Normandy's Patent (9 Moore, P. C. C. 452).

CHAPTER XIII.

ASSIGNMENTS OF LETTERS PATENT AND LICENCES.

Power both to assign and to license is by implication given to the patentee by the letters patent. To be a valid instrument, an assignment ought to be a deed under hand and seal. Previous to the Patent Law Amendment Act, 1852, letters patent contained a clause avoiding them, in case they became vested in more than twelve persons at the same time. But the 36th section of that Act declares that, notwithstanding any proviso that may exist in former letters patent, it shall be lawful for a larger number than twelve persons, hereafter, to have a legal and beneficial interest in such letters patent. In case of the death of the patentee before the expiration of the letters patent, they pass to his executors or administrators, and not to his heir.

It is usual to introduce into assignments covenants on the part of the patentee, that he is the first and true inventor, and that the patent is a valid one; and it may be well to make the patentee covenant to do what is necessary, in the event of an application to the Privy Council for a confirmation of the patent.

In an assignment of a patent granted in this country subsequently to the grant of a foreign patent for the same invention, it is important (in consequence of the operation of the 25th section of the Patent Law Amendment Act, 1852) that the foreign patent should be kept on foot, and the vendor should enter into a covenant for that purpose. A purchaser sometimes requires the whole of the annuities in the previous

foreign patent to be paid up. The same course may become necessary in the case of a licence, and is certainly desirable where the licensee may incur expense and change his position in consequence of the licence, and relying upon its continuance.

It is no answer to an action to enforce a contract for the purchase of a patent for a stipulated sum (Hall v. Conder, 2 C. B. N. s. 22), nor to an action to enforce payment of a royalty under a licence (Smith v. Scott, 5 Jur. n. s. 1356), to plead that the patent is wholly worthless and of no utility, and that the subject-matter of the patent was not the novel invention of the plaintiff, there being no proof of fraud, and no express Such a contract was held merely to have the effect of placing the purchaser in the same situation as the seller was with reference to the patent, and the purchaser is bound to take it with all its faults. This being so, it is desirable to consider whether or not an express warranty of the patent should not be introduced into contracts of this nature. See also Smith v. Neale (2 C. B. N. s. 67).

The purchaser, in addition, ought invariably to have a search made by a competent person at the Patent Office as to the novelty of the invention, prior to his entering into a contract for the purchase.

A licensee during the continuance of the licence cannot set up as a defence to an action for the royalty that the invention was not new or not useful, or that the patentee was not the first inventor, or that the specification is insufficient. (Noton v. Brooks, 7 H. & N. 499; Trotman v. Wood, 16 C. B. N. s. 479; Adie v. Clark, L. R. 2 App. Ca. 423.) But when in such a case the claim in the specification is susceptible of two constructions, one of which would make the specification bad and the other and more natural one would make it good, the licensee may insist that the latter is

the true construction (Trotman v. Wood, 16 C. B. N. s. 479). Even where no formal licence has been executed, a person who has paid money in the nature of a royalty will not be allowed to dispute the validity of the patent (Crossley v. Dixon, 10 H. L. C. 293). Neither will a patentee after assigning all his interest in a patent for a valuable consideration be allowed, in an action against himself for an infringement, to raise the question whether the patent is void for want of novelty (Walton v. Lavater, 8 C. B. N. s. 162, 187); and see also Chambers v. Crichley (33 Bea. 374). Furthermore, a licensee will not be permitted to use the invention without payment of the royalties he has covenanted to pay, even after the patent has been found invalid in proceedings between other parties (The Grover and Baker Sewing Machine Company v. Millard, 8 Jur. n. s. 713). But where judgment was given by consent before declaration filed in an action by a patentee against the members of a partnership firm for an alleged infringement, and the defendants immediately took a licence to use the invention, and the patentee subsequently instituted a suit to restrain infringement against the defendants at law and two fresh partners, it was held that the defendants in equity were not estopped from disputing the validity of the patent (Goucher v. Clayton, 11 Jur. n. s. 107).

A licensee has, however, a right to have it ascertained what is the field covered by the specification as properly construed, and is entitled to say that he has not gone inside that field. He may seek to have the boundary of the patentee's invention defined with the view of showing that he had not rendered himself iable to make the payments stipulated in the licence (Adie v. Clark, L. R. 4 App. Ca. 423). And after a licence has been determined, a licensee is at liberty to dispute the validity of a patent in a suit for an injunc-

tion to restrain an infringement. (Dangerfield v. Jones, 13 L. T. N. s. 142; and see Neilson v. Fothergill, 1 W. P. C. 290.)

A patentee will not be allowed to publish advertisements and circulars calculated to deter the public from dealing with his licensee (*Clark* v. *Adie*, 21 W. R. 764).

Bearing in mind the decision in Wallington v. Dale (ante, p. 186) it may be well to insert in an assignment a covenant binding the assignor not to enter a disclaimer or file a memorandum of alteration without the written authority of the assignee.

Licences have various intents. In their most general form, they are tantamount to an assignment of the patentee's whole rights. But usually they are for a term shorter than that mentioned in the patent, and sometimes they do not extend to the whole of the invention. A licence may be restricted, likewise, to a particular district. What is called an exclusive licence is one by which the patentee binds himself not to empower any other person to exercise the patent privilege, either at all or within a given district.

A licence to A. to manufacture a patent article is an authority to his vendees to vend it without the consent of the patentee (*Thomas* v. *Hunt*, 17 C. B. N. S. 183).

The consideration for the grant of a licence is usually an immediate money payment, or a periodical payment, which may be either of a certain amount, or dependent upon the extent to which the licensee uses the invention. In the last case, care should be taken not to create a partnership when no partnership is contemplated. See *Ridgway* v. *Philip* (1 Cr. M. & R. 415); *Elgie* v. *Webster* (5 M. & W. 518).

In preparing licences, the following points should be attended to:—The patentee ought to enter into the usual qualified covenants that the patent is valid, and

that he has a right to grant the licence. The licensee should covenant to pay any sums, the payment of which is postponed to a future time. Where the payments are to vary with the extent to which the licensee shall use the invention, there ought to be covenants. on the part of the licensee, to render properly verified accounts, and to allow periodical inspections of books, machinery, stock, &c. If it be intended that the licensee should not be permitted to question the validity of the patent, or the sufficiency of the specification, recitals should be introduced affirming these points, or express covenants debarring the licensee from raising the question. But recitals can only affirm the facts as they stood at the time of the execution of the deed; covenants may be made to apply to all future time. Recitals, however, will have the effect of stopping the parties from disputing the facts recited. (Bowman v. Taylor, 2 Ad. & El. 278; Hills v. Laming, 9 Exch. 256.) In the absence of such recitals or covenants, a licensee, when sued for money reserved by the licence, may set up, as a defence, that the patent is void, where the contract is executory, or where there is the taint of fraud (Hayne v. Maltby. 3 T. R. 438); and see Pidding v. Franks (1 Mac. and Gord. 56). On the other hand, refer to the case of Lawes v. Purser (6 Ell. and Bl. 930). This was an action brought by a patentee upon an agreement whereby the defendant contracted to pay a certain sum per ton of an article manufactured and sold by him, by permission of the plaintiff to him given at his request, the sole manufacture and sale of such article being the subject of the plaintiff's letters patent. The invention having been used by the defendant, he refused to pay the stipulated sum, pleading that the letters patent were void, and that he had a right to make and sell the article without licence. It was held

that the defendant was not entitled to set up such a defence, the contract having been executed, and no fraud being alleged. But one of the judges thought that if the defendant had given notice that he disputed the validity of the patent, and would in future use the invention in his own right, such notice would change the position of the parties; for after it, the patentee might sue the defendant for an infringement of his patent for any subsequent user; and, perhaps, in an action on the agreement for the price of such subsequent user, the invalidity of the patent might be a defence.

It is prudent to insert a clause giving the patentee power to render the licence void, in case of non-payment of royalties or other sums reserved, or on nonperformance of any of the covenants. Power is sometimes reserved to place the royalties in the hands of a stakeholder during litigation affecting the patent.

It seems that a licence is not assignable to a third person in the absence of an express or implied power to assign, such as where the licence is granted to the licensee, his executors, administrators, or assigns.

In the case of an exclusive licence, it is desirable that the licensee should covenant to pay a certain minimum sum at stated periods in the shape of royalty; and it is the usual practice to insert covenants on the part of the patentee to proceed against persons infringing the patent (see *Henderson* v. *Mostyn*, L. R. 3 C. P. 202), or to permit the licensee to proceed in the patentee's name. In the absence of such a stipulation, the licensee would be without any remedy at law for an infringement. The Court will, however, grant an injunction at the suit of exclusive licensees (*Renard* v. *Levinstein*, H. & M. 628).

It has been decided that money paid in consideration of a licence cannot be recovered by action when the patent turns out to be void (Taylor v. Hare, 1 Bos. and Pul. N. R. 260); except where fraud is proved (Lovell v. Hicks, 2 Y. and C. 472). To meet this case, it will be prudent to have a covenant in the licence, under which the parties may re-adjust their accounts in the event of the patent proving void or voidable.

When a patent is granted to two or more persons, each may use the invention without being liable to account to the other (Mathers v. Green, 1 Law Rep. Ch. Ap. 29, before Lord Cranworth, C.). See, however, the earlier case of Hancock v. Bewley (Johns. 601), as to the rights of parties where letters patent are vested in trustees for two or more persons as tenants in common.

The assignee of part of a patent separate from other parts may bring his action for an infringement of such part without joining as plaintiffs those persons who have distinct interests in the other parts, but have no interest in the damages sought to be recovered (Dunnicliff v. Mallet, 7 C. B. N. s. 209). This decision was mentioned with approval by the Court when delivering judgment in the case of Walton v. Lavater (8 C. B. N. s. 184), where it was unsuccessfully contended that the assignee of two several moieties of a patent had not a sufficient legal interest to sue for its infringement.

A simple licence, not containing covenants, need not be under seal (Chanter v. Dewhurst, 12 M. and W. 823); nor, it seems, if it be not a deed, does it require a stamp (Chanter v. Johnson, 14 M. and W. 408). Otherwise a stamp of 10s. must be impressed in ordinary cases, and an ad valorem stamp on the consideration-money when a fixed sum is paid.

The 35th section of the Patent Law Amendment Act, 1852, requires all assignments of letters patent, and of any interest therein, and all licences to be registered,

and provides that until such registration, the grantee of the letters patent shall be deemed the sole proprietor of the exclusive privileges thereby given.

Under this clause it has been held that an assignee cannot bring an action for an infringement against third parties until his assignment has been registered (Chollett v. Hoffman, 7 E. & B. 636). signee of a patent may maintain a suit against the assignor and subsequent licences of the assignor with notice of the assignment to restrain them from using the patent, although at the time of the institution of the suit the assignment had not been registered (Hassall v. Wright, L. R. 10 Eq. 509). And from the same case it seems that registration relates back to the date of the assignment, so as to enable the assignee to maintain a suit to restrain infringement instituted between the dates of the assignment and registration. When the executors of a patentee obtained probate of their testator's will and assigned his patent, but the probate was not registered till after the assignment, it was held that the assignment was valid (Ellwood v. Christy, 10 Jur. n. s. 1079; S. C. 11 L. T. n. s. 342).

The Master of the Rolls under this section ordered the registry of a second assignment of a patent to be expunged on the application of the assignees under a prior assignment, which had not been registered until after the second, as it appeared that the second assignment had been executed for a fraudulent and improper purpose (Re Green's Patent, 24 Bea. 145). In another case, the Master of the Rolls said, that if there were two deeds assigning the patent simpliciter to two different persons, and the second was registered before the first, and if it were clearly proved that the second deed was executed with full and complete notice of the prior one, though subsequently registered, he conceived he should have power to direct

an entry to be made upon the register, stating the facts. It is the duty of the Court, under this section of the Act, to insert on the register any facts relating to the proprietorship, but not the legal inferences to be drawn from them (Re Morey's Patent, 25 Bea. 58). One of two joint patentees assigned by deed his interest in the patent to a third person, and released him from all claims on the part of both patentees. At the instance of the other patentee the Master of the Rolls ordered the entry of the assignment to be expunged (Re Horsley and Knighton's Patent, L. R. 8 Eq. 475).

In the matter of the same patent (L. R. 4 Ch. 784) it was decided that there was no appeal from such an order of the Master of the Rolls. But the jurisdiction having now been transferred to the High Court of Justice (*Re Morgan's Patent*, 24 W. R. 245), it would seem to be subject to appeal.

It is the practice of the Patent Office to register all instruments presented to them relating in any manner to patents which have been completed, on payment of a fee of five shillings upon each instrument; but the office declines to register any instrument relating to inventions only provisionally protected.

The office will register deeds of trust if presented for that purpose; but it is not the general practice to register such documents.

CHAPTER XIV.

INFRINGEMENTS.

THE question of infringements has already been touched upon in a preceding chapter in connection with the question of the novelty of an invention. In this chapter the first section will treat of the practice connected with the proceedings in actions for infringements in the High Court of Justice; and the second will be devoted to a discussion of the substantive law and the decided cases.

§ 1. The Practice.

When a patentee's rights had been infringed, it was formerly matter for consideration whether he should proceed at Law, or in Equity, or in the Courts both of Law and Equity at the same time. If his object was only damages for past infringements, his course was to bring an action at Common Law; but if he required an injunction to restrain future infringements, or an inspection, or an account of profits, he was compelled to proceed in a Court of Equity. Recent legislation, and especially the Judicature Acts of 1873 and 1875, have, however, abolished the distinction between the Courts of Law and Equity, and a patentee may now obtain an injunction, an inspection, and an account, or damages, in any division of the High Court of Justice.

The power to order an injunction, inspection, or account was first conferred on the old Courts of Common Law by the Patent Law Amendment Act (15 & 16 Vict. c. 83), the 42nd section of which enacts that

the Court in which any action for the infringement of letters patent may be pending, or a Judge of the Court if the Court be not sitting, may make an order for an injunction, inspection, or account, on the application of either party. The following cases have been decided on this section of the Act: Vidi v. Smith (3 E. and B. 969); Holland v. Fox (3 E. and B. 977); Shaw v. Bank of England (22 L. J. N. s. Ex. 26); Amies v. Kelsey (22 L. J. N. s. Q. B. 84); The Patent Type Founding Company Limited v. Lloyd (5 H. and N. 192).

An injunction might also have been ordered by a Court of Common Law under the Common Law Procedure Act, 1854 (17 & 18 Vict. c. 125, s. 79), and at any stage of the cause (s. 82); but in Gittins v. Symes (24 L. J., C. P. 48), it was held that the Court would in the first instance only grant a rule nisi, and on cause being shown would give such directions as would be given by a Court of Equity.

The Court of Chancery would not as a general rule interfere by injunction, unless the plaintiff had established his title in a Court of Law. Where, however, that had been done, and there had been no attempt to disturb the verdict, then an Equity Judge would, almost as a matter of course, assist the patentee by an injunction, with a decree for an account. The Court, however, could not give damages for past infringements. But by the 21 & 22 Vict. c. 27 (commonly called Sir Hugh Cairns' Act), the Court of Chancery was empowered in injunction cases to award damages to the injured party in addition to other relief, and the same Act enabled it to cause the amount of such damages to be assessed, and any question of fact arising in the suit to be tried either by a jury before the Court itself, or before the Court itself without a jury. And by the 25 & 26 Vict. c. 43 (known as Mr. Roll's Act), the Court was bound itself to try every question of law

and fact arising in any cause pending before it, subject only to the proviso that issues might be directed to try questions of fact at the assizes, when it appeared to the judge that the matter might be more conveniently tried there. See Young v. Fernie (1 De G. J. and S. 353).

The above-mentioned Acts have not been expressly repealed, though they are, in fact, superseded by the Judicature Acts under which every question of law and fact, or mixed law and fact, arising in any action is now determined wholly in that Division of the High Court of Justice in which the action is brought, subject to certain powers of transfer of the action from one Division to another, and subject also to the further qualification that trials by jury cannot be had before a judge of the Chancery Division (Warner v. Murdoch, L. R. 4 Ch. D. 750).

It has, however, always been and still is the practice of the Court, when the plaintiff can make out a proper case, to grant an interlocutory injunction, that is, an injunction before the trial of the action, without requiring the patent to be established. principle on which the Court acts," said Lord Eldon, in Hill v. Thompson (3 Mer. 622), "in cases of this description is the following: Where a patent has been granted, and an exclusive possession of some duration under it, the Court will interpose its injunction, without putting the party previously to establish the validity of his patent by an action at law. where the patent is but of yesterday, and, upon an application being made for an injunction, it is endeavoured to be shown in opposition to it that there is no good specification, or otherwise that the patent ought not to have been granted, the Court will not, from its own notions respecting the matter in dispute, act upon the presumed validity or invalidity of the patent, with-

out the right having been ascertained by a previous trial, but will send the patentee to law, and oblige him to establish the validity of his patent in a court of law, before it will grant him the benefit of an injunction." And, again, in Dudgeon v. Thomson (80 L. T. N. S. 244), Sir George Jessel, M. R., said: "The Court can grant an injunction before the hearing when the patent is an old one and the patentee has been in long and undisturbed enjoyment of it, or when its validity has been established elsewhere and the Court sees no reason to doubt the propriety of the result, or when the conduct of the defendant is such as to enable the Court to say that as against the defendant himself there is no reason to doubt the validity of the patent." (See also Renard v. Levinstein, 10 L. T. N. s. 94, affirmed on appeal, ibid. p. 177; Betts v. Menzies. 3 Jur. n. s. 357; Clark v. Ferguson, 5 Jur. n. s. 1155.)

When it can be shown that the patentee has had undisturbed possession for many years, the Court will grant an interlocutory injunction without requiring the patent to be established, notwithstanding doubts may exist as to the validity of the patent. (Losh v. Haque, 1 W. P. C. 201; Muntz v. Foster, 2 W. P. C. 93, 95; Betts v. Menzies, 3 Jur. N. s. 357.) Butin order to establish a right to an interlocutory injunction on this ground, the patentee must show actual public user of the invention (Plimpton v. Malcolmson, L. R. 20 Eq. 37), unfettered by the necessity of obtaining the licence of any prior patentee. (Heugh v. Magill, W. N., 1877, 62.) Where the patent has been the subject of several suits, all of which have terminated in favour of the patentee, an interlocutory injunction will be granted, notwithstanding a fresh fact is brought forward tending to impeach the novelty of the invention (Newall v. Wilson, 2 De G. M. & G. 282; Davenport v. Jepson,

4 De G. F. & J., 440), or the defendant offers to keep an account. (Renard v. Levinstein, 2 H. & M., 628.) And the fact that the validity of the patent has been established in Scotland is sufficient primā facie evidence of the validity of the patent to warrant the granting an interlocutory injunction in England. (Dudgeon v. Thomson, 30 L. T. N. s. 244.)

If the plaintiff has shown negligence in prosecuting his rights, even though his patent has been established against another defendant (Bridson v. Benecke, 12 Bea. 1; Bovill v. Crate, L. R. 1 Eq. 388), or if the fact of infringement is matter of doubt, an injunction will be refused until after a trial; and even then, if there is ground for supposing that a new trial will be obtained. (Collard v. Allison, 4 My. & Cr. 487; Electric Telegraph Co., v. Nott, 2 Coop. C. C. 41, and the other cases collected by the reporter.) In almost all cases, however, the Court thinks it right, when it postpones the consideration of the injunction, to order the defendant to keep an account until the plaintiff has had an opportunity of testing the validity of his patent. But if the interlocutory injunction be granted, the Court always requires from the plaintiff an undertaking to abide by any order the Court may make as to damages in case it should ultimately be of opinion that the defendant has sustained any by the injunction which the plaintiff ought to pay. (Wakefield v. Duke of Buccleuch, 11 Jur. n. s. 523.)

For further statements of the general principles on which the Court acts in granting or withholding in-

¹ In this case, Cottenham, C., said that the Court will not grant an injunction where the legal right is disputed, unless it is satisfied that the legal right will eventually be established; nor where the legal right is disputed, unless satisfied that the acts complained of are a violation of it. Where, however, the sole question is the validity of the patent, and there has been exclusive enjoyment under it for a reasonable time, the Court will interpose, by injunction, until the invalidity has been established; but the injunction will be refused if there is conflicting evidence as to the infringement.

terlocutory injunctions see Bacon v. Jones (4 My. & Cr. 434); Bridson v. M'Alpine (8 Bea. 229); Davenport v. Jepson (4 De G. F. & J. 440); Plimpton v. Spiller (L. R. 4 Ch. D. 286).

The Court, however, being now empowered to try the validity of the patent, and having the control of the proceedings, and being, consequently, able to prevent any undue delay, is less disposed than formerly to grant an interlocutory injunction, but will generally content itself with giving directions to insure an immediate trial of the questions at issue between the parties, and order the motion for the injunction to stand to the hearing of the cause, adding, when necessary, a direction for the defendant to keep an account. The action may then proceed to trial in the ordinary way. (See the remarks of Sir George Jessel, M. R., in Plimpton v. Malcolmson, L. R. 20 Eq. 37.)

It is open to either party to move that issues may be settled, raising the various questions of fact in the cause. In a patent case the issues usually are, whether the invention be new, whether it be useful, whether it was a new manufacture, whether the patentee was the first and true inventor, whether the specification be sufficient, and whether the defendant has infringed; but, of course, these may be varied as circumstances require. Since the Judicature Acts, however, the practice appears to be not to apply for issues, but to let the action come on for trial generally, upon the pleadings and objections and particulars of breaches.

It is not a matter of course for the Court to grant issues, and they are sometimes refused (Davenport v. Goldberg, 2 H. & M. 282; Davenport v. Phillips, 5 N. R. 485; Bovill v. Goodier, Law Rep. 1 Eq. 36); and a reference to a jury will, in general, not be allowed where the issues proposed have been already determined in a suit between the plaintiff and other parties.

If, however, it appear that there is really a doubtful question at issue, the Court will not decide it for itself if either party desire a jury. (Davenport v. Goldberg, 2 H. & M. 282.) In this case the plaintiffs had established their patent at law in a suit against one Rickard, and afterwards filed a bill against one Jepson, in the Court of Chancery. The usual issues were tried before Wood, V. C., when the jury disagreed, and were discharged without giving a verdict. The issues were again tried before another jury, when the defendant did not appear, and a verdict was taken for the plaintiffs, and ultimately a decree for an injunction was made against Jepson. The plaintiff now filed a bill against a third infringer, who, by his answer, put in issue all the points disputed in Davenport v. Jepson, and moved to have the issues tried before a jury. Wood, V. C., refused the application, except as to the issue of infringement, and made the following observations:---

"In what position would a patentee be placed if he is to try his right ab initio against every separate infringer in infinitum? That certainly is a view of his rights which has never been adopted by this Court. If the defendant thinks that he can get rid of the patent, he had better proceed by scire facions to repeal or annul it; if he does not choose to take that course, but simply disregards it, and stands on his defence, I must take the validity of the patent as already sufficiently established against him." See also Davenport v. Phillips (5 N. R. 485). But in the absence of special circumstances, cases in the Chancery Division have generally been tried without a jury. (Patent Marine Mansions Company v. Chadburn, L. R. 16 Eq. 447; and see Bovill v. Hitchcock, L. R. 3 Ch. 417.)

By the Patent Law Amendment Act, 1852, section 41, the plaintiff in any action for the infringement of

letters patent is required¹ to deliver particulars of the breaches complained of in the action, and the defendant in pleading thereto is to deliver particulars of the objection to the patent on which he means to rely; and no evidence is to be allowed at the trial in support of any alleged infringement or objection to the patent not contained in these particulars. This practice was adopted by the Court of Chancery (Finnegan v. James, L. R. 19 Eq. 73), and is now the rule in the Chancery Division of the High Court of Justice.

If the particulars delivered are insufficient, further and better particulars may be required. In Needham v. Oxley (1 H. & M. 248), it was held by Wood, V. C., that particulars of breaches are sufficient if, taken together with the pleadings, they give the defendant full and fair notice of the case made against him. See, however, the subsequent case of Curtis v. Platt (8 L. T. 657), before the same learned judge.

A plaintiff may be ordered to point out by reference to the pages and lines the parts of his specification which he alleges to be infringed (Lamb v. The Nottingham Manufacturers' Company, Seton on Decrees, 4th Ed. p. 349). But this will not be required when the things alleged to be an infringement have been made an exhibit in the action. (Batley v. Kynock, No. 2, L. R. 19 Eq. 229.)

The 41st section of the Patent Law Amendment Act,

¹ At common law it is held that the objections cannot go beyond the pleas; they are merely to state more particularly what the pleas state generally. (Macnamara v. Hulse, 2 W. P. C. 128.) As to other points bearing upon this subject at common law, see Palmer v. Wagstaff (8 Exch. Rep. 840); Palmer v. Cooper (9 Exch. Rep. 231); Hull v. Bollard (1 H. & N. 134); Lister v. Leather (3 Jur. N. s. 816); Greaves v. Eastern Counties Railway Company (1 Ell. & Ell. 961; S. C. 5 Jur. N. s. 733); Talbot v. Laroche (15 C. B. 310); Electric Telegraph Company v. Nott (4 C. B. 462); Fisher v. Dewick (1 W. P. C. 551 n); Heath v. Unwin (1 W. P. C. 551); Jones v. Berger (1 W. P. C. 544 n); Housshill Company v. Neilson (1 W. P. C. 552); Holland v. Fox (1 C. L. R. 440).

1852, requires the particulars of objection to state "the place or places at, or in which, and in what manner the invention is alleged to have been used or published prior to the date of the letters patent," and under this section it has been held by the Court of Appeal, contrary to what had been previously held (Penn v. Bibby, L. R. 1 Eq. 508; Grover & Baker Sewing Machine Company v. Wilson, W. N., 1870, 78), that an order for better particulars must follow the exact words of the Act. (Flower v. Lloyd, 45 L. J. N. s. 748.) under such an order the defendant must still furnish full and sufficient particulars (Flower v. Lloyd, cited above); and it is not a sufficient compliance with the order to give merely the places of user without giving also the names and addresses of the persons alleged to have used the invention. (Flower v. Lloyd, 20 S. J. 860; Crossley v. Tomey, L. R. 2 Ch. D. 533.) objection alleging the surrender of a previous American patent and prior publication in certain journals of specified dates, and in sketches and drawings in the Patent Office Library, was held insufficient, and the defendant was required to specify the date of the American patent, the name of the patentee, the date of the alleged surrender, and the pages of the publications referred to, and was also ordered to identify (Plimpton v. Spiller, 20 S. J. 859.) the drawings.

Particulars of objections, stating the use of the alleged invention, "in the following among other instances," were held sufficient; but the insertion of such words is in general undesirable. (Penn v. Bibby, L. R. 1 Eq. But allegations of prior user "by carriage builders generally throughout Great Britain," or by carriage builders in certain specified places, and "various other of the principal towns of Great Britain," were held insufficient. (Morgan v. Fuller, No. 2, L. R. 2 Eq. 297.)

A defendant in a suit for injunction will be permitted, at any time before trial and on payment of costs, to amend his particulars of objection, by alleging prior users discovered since the objections were first delivered (Penn v. Bibby, L. R. 1 Eq. 548), and this after the action has been set down for trial. (Wilson v. Gann, 23 W. R. 546.) And this liberty has been allowed even during the trial, and after the plaintiff's case was concluded. The practice of the Court in the latter case appears to be to refuse the evidence when tendered, but to give leave to make a special motion that it may be received. (Renard v. Levinstein, 13 W. R. 229; 11 L. T. N. S. 505; Daw v. Eley, L. R. 1 Eq. 38.)

An objection to the validity of a patent taken under the 25th section of the Patent Law Amendment Act, 1852, on the ground of the expiration of a foreign patent for the same invention, cannot be taken at the trial unless it has been raised on the pleadings. (Bovill v. Goodier, No. 2, L. R. 2 Eq. 195.) Under an objection that the invention is not new the defendant may show the want of novelty of one of two inventions described in the specification. (Sugg v. Silber, L. R. 2 Q. B. D. 493.)

When a plaintiff files several bills at one time against separate infringers, the Court will, on the application of the several defendants, order the validity of the patent to be tried in one of the suits, and will, in the meantime, stay proceedings in the other suits; but this order will not be made until the defendants have given full discovery of the machines used by them and alleged to be infringements. (Foxwell v. Webster, 2 Dr. & Sm. 250; S. C. on appeal, 10 Jur. N. s. 137.)

^{&#}x27; It was said by Wood, V. C., in the case of Bovill v. Crate (L. R. 1 Eq. 388), that when the infringers are very numerous, the proper course

Where two patents were granted to different persons for the same invention, Kindersley, V. C., refused to interfere by injunction and left them to try the legal right by scire facias, being prevented by the 25 & 26 Vict. c. 42, s. 1 (Mr. Rolt's Act), from directing a case for the opinion of a court of law. (Copeland v. Webb, 11 W. R. 134.) See also Baskett v. Cunningham (2 Ed. 137).

In connection with this subject it may be useful to remember that the Court looks with distrust on experiments conducted for the express purpose of manufacturing evidence for the cause. (Young v. Fernie, 5 Giff. 577; Betts v. Neilson, L. R. 3 Ch. 429, 433.)

It is now settled that the plaintiff in a patent action cannot have both damages and an account of profits, but must elect between the two which he will adopt. (Neilson v. Betts, L. R. 5 H. L. 1.)

In estimating the amount of damages sustained by a plaintiff in respect of an infringement of his patent, the Court adopts a form of inquiry different from that which it employs in the analogous case of an imitation of a plaintiff's trade-mark. In the latter instance the Court will not assume in the absence of evidence that the plaintiff would have sold all the articles which the defendant has wrongfully sold. (The Leather Cloth Company v. Hirschfeld, 1 L. R. Eq., 299.) But every sale without licence of a patented article must be a damage to a patentee, and therefore the inquiry in a patent case will extend to the sale by the defendant of any articles made by him since the infringement was commenced. (Davenport v. Rylands, 1 L. R. Eq.

for a plaintiff to pursue before filing separate bills against all the infringers is to select one as a defendant, and write to the others, and ask if they object to be bound by the proceedings against that one and have the case tried once for all. And as to the circumstances which will entitle the plaintiff to an interlocutory injunction notwithstanding delay, see Bovill v. Smith, W. N. 1867, 240.

308.) The inquiry will extend to the sales by the defendant within six years before the commencement of the proceedings (Davenport v. Rylands, L. R. 1 Eq. 302; Crossley v. Derby Gas Light Company, 1 W. P. C. 119), but if the plaintiff be an assignee of the patent the amount will only be taken from the date of the registration of the assignment to him. (Ellwood v. Christy, 5 N. R. 312.) And in stating such an account the defendant must file an affidavit, stating the number of the patented articles made by him since the date of the patent, and the names and addresses of the purchasers to whom the same have been sold (Murray v. Clayton, L. R. 15 Eq. 115), and the account may be taken notwithstanding the pendency of an appeal. (Saxby v. Easterbrook, L. R. 7 Ex. 207.)

Where separate proceedings have been taken against the manufacturer and user of the patented article the plaintiff may have an account of profits against the manufacturer, and also damages against the user. (Penn v. Bibby, L. R. 3 Eq. 308.) And he cannot be compelled to accept the same royalty from a litigant as he receives from others (ibid); but a patentee being himself a manufacturer of the patented article, and having been in the habit of licensing the use of his invention on payment of a fixed royalty, is not entitled to claim as against an infringer a manufacturing profit in addition to his ordinary royalty Penn v. Jack, (L. R. 5 Eq. 81), and where such a patentee had in some instances received from users (not being the manufacturers of the patented article), his ordinary royalty, it was held that in every such case no further royalty was payable by the manufacturer (ibid).

In Smith v. London and S. W. R. Co. (Macr. P. C. 209), Wood, V. C., decided that the right to a decree for an account of the profits made, in respect of articles manufactured and used in infringement of a patent, is

ancillary to the injunction to restrain future infringements; it follows, therefore, that when the Court cannot interfere by injunction, as where the patent has expired before the suit comes to a hearing, the right to (Price's Patent Candle Company an account will fail. v. Bauwen's Patent Candle Company, 4 K. & J. 727.) In such a case, however, if the plaintiff could show that at the filing of the bill he was entitled to an injunction, the Court would at the hearing grant an inquiry as to damages, under Sir Hugh Cairns' Act. port v. Rylands, L. R. 1 Eq. 302.) But this latter rule was held not to apply when the proceedings have been commenced so immediately before the expiration of the patent as to render it impossible to have obtained an interlocutory injunction. (Betts v. Gallais, Now, however, an action for L. R. 10 Eq. 392.) damages for past infringement of an expired patent may be brought in the Chancery Division as well as in any other Division of the High Court of Justice.

It is a rule of the Court not to interfere until the patentee's rights have been actually violated. But where a defendant alleges an intention and claims the right to infringe, the Court will grant an injunction, although no actual infringement may have taken place. (Frearson v. Loe, L. R. 9 Ch. D. 48.) The case of Crossley v. Beverley (1 W. P. C. 119) shows how far the Court will go in aiding a patentee to repress infringements. It appeared that the defendants had been secretly manufacturing gas-meters, which were copies of those protected by the plaintiff's patent, their object being to pour them into the market as soon as the patent expired. A few days before the expiration of the patent, the plaintiff having discovered what had been done, filed his bill, and obtained an injunction to restrain the using of the articles so made even after the patent expired.

The Court has power to order the destruction of

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machines made in violation of a patent. (Betts v. De Vitre, 34 L. J. N. s. 289, 291; Tangye v. Stott, 14 W. R. 386.) However, where the patent was for a combination and the defendant might still use for other purposes the several parts of the machine, Wood, V. C., refused to order the machines to be destroyed, but directed them to be marked so as to prevent their being used at any future time in such a way as to continue the infringement. (Needham v. Oxley, 8 L. T. N. s. 604), and in Plimpton v. Malcolmson (Seton on Decrees, 4th Ed. p. 354) the order was that the defendant should upon oath deliver up to the plaintiff, or break up or otherwise render unfit for use the articles complained of. See also Frearson v. Loe (L. R. 9 Ch. D. 48, 67).

The Court will also assist a plaintiff suing in respect of an infringement of his patent by directing the defendant to permit an inspection of the processes used or the articles made by him in alleged violation of the rights of the plaintiff. (Bovill v. Moore, 2 Coop. C. C. 56; Brown v. Moore, 3 Bligh. 180; Morgan v. Seward, 1 W. P. C. 169; Russell v. Cowley, 1 W. P. C. 457.) In this last case, however, the order was by consent. In the case of The Patent Type Founding Company v. Walter (Johns. 727) the defendant, a printer, who used types alleged to be made in colourable imitation of the type patented by the plaintiffs, was on motion ordered by Wood, V. C., to deliver a sample of type to the plaintiffs for analysis.

But where in a suit for an injunction to restrain the infringement of a patent for a sewing machine an application was made for an inspection of all the machines

¹ A similar application having been made to the Court of Exchequer was refused by the Court, their lordships doubting whether the Patent Law Amendment Act, 1852, sect. 42, extended to enabling them to order a portion of the article to be given up for analysis. (*The Patent Type Founding Company Limited v. Lloyd*, 5 H. & N. 192; S. C. 6 Jur. N. s. 103.)

of every kind on the defendant's premises, the Court declined to make the order in the terms asked for, but (following what was stated to be the practice at common law) directed the defendant to verify on affidavit the several kinds of sewing machines which he had sold or exposed for sale since the date of the plaintiff's last disclaimer, and to produce at his solicitor's office one of each class for inspection by the plaintiff's solicitor and two of their scientific witnesses. (The Singer Manufacturing Company v. Wilson, 13 W. R. 560; S. C. 5 N. R. 505.) And inspection will not be granted unless the Court is satisfied that there is really a case to be tried at the trial, and that inspection is essential to enable the plaintiff to prove his case. (Piggott v. Anglo-American Telegraph Company, 19 L. T. N. s. 46; Battley v. Kynoch, L. R. 19, Eq. 90.)

In a suit for an injunction a defendant denying infringement may be compelled to answer whether he used the plaintiff's materials, whether he makes any addition to them, and whether such addition makes any difference. (Renard v. Levinstein, 10 L. T. N. s. 94.) As to the limits of such discovery see Crossley v. Tomey, 2 C. L. D. 53; Crossley v. Stewart, 1 N. R. 426; Rolls v. Isaacs, W. N. 1878, 36. As to the discovery which a defendant in such a suit may obtain from the plaintiff as to his patent, see Renard v. Levinstein (11 L. T. N. s. 79); Hoffman v. Postill (L. R. 4 Ch. 673).

When directors of a limited company are active parties in an infringement of a patent by the company, they may be made parties to a suit against the company, and may be ordered personally to pay the costs of suit. (Betts v. De Vitre, 11 Jur. N. s. 9, affirmed on appeal, L. R. 3 Ch. 429.)

In the event of one of two assignees of a patent dying, the surviving assignee may bring actions for infringements committed in the lifetime of his coassignee, and can recover the whole damages. (Smith v. London & N. W. R. Co., 2 E. & B. 69; S. C. Macr. P. C. 207.) An injunction will be granted at the suit of exclusive licensees, to restrain infringement of a patent (Renard v. Levinstein, 2 H. & M. 628).

Where a plaintiff in an action for infringement has obtained judgment at the trial the injunction will not be suspended pending an appeal. (Flower v. Lloyd, 36 L. T. N. s. 444.)

By the 43rd section of the Patent Law Amendment Act, 1852, the judge is empowered on the trial of any action for infringement to certify that the validity of the letters patent came in question in the action; and this certificate being given in evidence in any suit or action for infringement will entitle the plaintiff therein to his full costs, taxed as between attorney and client, unless the judge shall certify that he ought not to have This certificate was given in suits in such full costs. the Court of Chancery as well as in actions at common (Needham v. Oxley, 8 L. T. n. s. 604; Davenport v. Rylands, L. R. 1 Eq. 308.) In the latter case, Wood, V. C., decided that a patentee who has obtained this certificate may have his full costs in any subsequent action for infringement, although the validity of the patent may not have been in question in such action. In Penn v. Bibby (L. R. 3 Eq. 309) it was held that the section does not apply to the costs of the first trial.

As to what is a sufficient certificate to enable the Court to direct the costs to be taxed as above mentioned, see *Betts* v. *De Vitre* (11 Jur. n. s. 11); *Bovill* v. *Hadley* (17 C. B. n. s. 435).

The question of infringement is one of mixed law and fact. "There may well be a case (said Lord Campbell in De la Rue v. Dickenson, 7 E. & B. 738), where the judge may and ought to take upon himself to say that the plaintiff has offered no evidence to be left to

the jury to prove infringement, as if there be a patent for a chemical composition, and the evidence was that the defendant had constructed and used a machine for combing wool. But if the evidence has a tendency to show that the defendant has used substantially the same means to obtain the same result as specified by the plaintiff, and scientific witnesses have sworn that the defendant actually has used such means, the question becomes one of fact or of fact mixed with law, which the judge is bound to submit to the jury." The construction of the specification is for the Court alone after the meaning of technical terms have been ascertained by the jury. But in deciding the question of infringement there is (said Lord Wensleydale in Seed v. Higgins, 8 H. L. Ca. 550), "a question of fact wholly for the jury, viz. what the defendants have done; and if scientific evidence is necessary fully to elucidate the case on either side, it is no doubt admissible; and in determining the question of infringement the judge must apply what the jury find to be true."

It seems that a patentee will not be permitted to publish statements of his intention to commence legal proceedings, with a view of deterring persons from purchasing articles made in alleged infringement of his patent, when he has no bonâ fide purpose of the kind. (Rollins v. Hinks, L. R. 13 Eq. 355; Axmann v. Lund, L. R. 18 Eq. 330.)

§ 2. The Substantive Law of Infringements.

What is the meaning in patent law of the word infringement? It is the unlicensed copying of a patentee's contrivance, as described in his specification, with the view of effecting the same object. The patent will be equally infringed whether the contrivance has been textually and literally copied, or whether

it has been copied with changes and variations, so as to ground an assertion that the original and the copy are different, whilst in substance and essence they are the same. In the latter case, certain devices (mechanical equivalents, addition or transposition of parts, &c.) have been employed to give a different colour and appearance to the copy, with the design of seeming not to trespass within the pale set up by the patentee in describing his invention, and with the view of causing that copy to be mistaken for a distinct plan. This scheme, however, will not be successful, for if it is really the same thing in a different dress, it is nothing less than an illegal encroachment upon the patentee's property, an invasion of his rights-in short, an infringement of his patent. The leading idea, or principle, as it is usually termed, remaining the same, the contrivances will be considered identical, and when that is capable of satisfactory proof, the continuance of the infringement may be stopped by application to a court of law, and the infringer may be compelled to make compensation for the injury he has committed.

A person will not be allowed to deprive an inventor of the fruits of his discovery by substituting a well-known equivalent, either chemical or mechanical, for some part of the patented invention. Where the question arises as to the infringement of the patent for a machine, the substance and not merely the form of the invention will be looked at in a court of justice. Therefore, where it is shown that two machines are alike in principle, and that the constructor of the second machine has carried the principle of the first into effect, by substituting one mechanical equivalent for another, here it will be held that there has been an infringement. (See Morgan v. Seaward, 1 W. P. C. 171; Thorn v. Worthing Skating Rink Company, L. R. 6 Ch. D. 415 n.)

"I know there is by some confusion of thought" (said Lord Cairns, C., in Dudgeon v. Thomson, L. R. 3 App. Ca. 44) "a notion sometimes entertained, that there may be something like an infringement of the equity of a patent. I cannot think that there is any sound principle of that kind in our law. which is protected is that which is specified, and that which is held to be an infringement must be an infringement of that which is specified. But it will not be the less an infringement because it has been coloured or disguised by additions or subtractions. which additions or subtractions may exist and yet the thing protected by the specification be taken notwithstanding." And in the same case (p. 53) Lord Blackburn said, "If part of the property in the invention be really taken, there is an infringement, however much that may be disguised or sought to be hidden. If that is detected by the patentee, and if what is taken is really part of his property given to him by the letters patent, he has a right to proceed against the infringer, however ingeniously the colours may have been contrived to try to conceal the fact that there has been a taking of part of the property."

The following cases will show clearly that to make a colourable alteration in a patented invention, or to arrive at the same result by means which are substantially the same, although independently discovered, will be an infringement of the patent. Walton took out a patent for making cards for carding textile materials with the aid of caoutchouc, the object being to obtain an increased degree of elasticity and durability. The wire teeth were described as inserted in a foundation of slices of caoutchouc, on the back of which a piece of cloth was cemented. The claim was not confined to the use of caoutchouc in slices, but he claimed

the exclusive right of making cards by fixing the teeth in caoutchouc as the fillet, or sheet, or medium. After the date of this patent, Potter and Horsfall took out a patent for a new material for forming the backs of cards, and their mode of preparing it was by repeatedly passing a woven fabric of a peculiar construction through, and saturating it with, a solution of caoutchouc, and then drying it to evaporate the solvents, and leave the fabric impregnated and coated with caoutchouc, the object being to render the fabric so dealt with extremely elastic in the direction of the thickness of the fabric, so as to impart elasticity to the wire teeth when set. It was held (Walton v. Potter, 1 W. P. C. 585) that Potter's process fell within the generality of Walton's claim, and was an infringement of his patent. At the trial, Tindal, J., told the jury that, "when a party has obtained a patent for a new invention made by his own ingenuity, it is not in the power of any other person, simply by varying in form or in immaterial circumstances the nature or subjectmatter of that invention, to obtain either a patent for it himself, or to use it without the leave of the patentee, because that would be in effect and in substance an evasion of the right; and therefore what you have to look at upon the present occasion is not simply whether in form or in circumstances—that may be more or less immaterial—that which has been done by the defendants varies from the specification of the plaintiff's patent, but to see whether in reality, in substance, and in effect, the defendants have availed themselves of the plaintiff's invention, in order to make that fabric, or to make that article which they have sold in the way of their trade." Then referring to a card purchased from the defendants, which was produced to the jury, he said, "Now, what you have to say is, whether you are satisfied that the card produced is a specious variation in form only, an ingenious alteration in the mode of adaptation, or whether it is really and substantially a new discovery on the part of the defendants. In the one case it would be an infringement of the patent; in the other it would not. . . . There can be no doubt whatever that, although one man has obtained a patent for a given object, there are many modes still open for other men of ingenuity to obtain a patent for the same object; there may be many roads leading to one place; and if a man has. by dint of his own genius and discovery, after a patent has been obtained, been able to give to the public, without reference to the former one, or borrowing from the former one, a new and superior mode of arriving at the same end, there can be no objection to his taking out a patent for that purpose. has no right whatever to take, if I may so say, a leaf out of his neighbour's book, for he must be contented to rest upon his own skill and labour for the discovery, and he must not avail himself of that which has been before granted exclusively to another; and therefore the question again comes round to this, whether you are of opinion that the subject-matter of this second patent is perfectly distinct from the former, or whether it is virtually bottomed upon the former, varying only in certain circumstances which are not material to the principle and substance of the invention."

Under a patent for improvements in apparatus for the manufacture of sulphate of soda, &c., the plaintiff claimed the use of iron retorts worked in connection with each other. The essence of the invention was held to be the use of two chambers with separate furnaces worked in connection with each other, so that the materials might be decomposed in one and then removed to and finished in the other. The defendant for the same purpose employed two chambers, one of ron, the other of brick. This was decided to be an infringement of the patent (Gamble v. Kurtz, 3 C. B. 425).

Trotman obtained a patent for improvements in anchors. His mode of making the improved anchor was to affix the "palm" and "horn" to the back of the "arm" by a separate operation. It was held that the making of similar anchors by forging the arm, palm, and horn all in one piece was an infringement (Trotman v. Wood, 16 C. B. N. s. 479).

It is not permissible for a person to evade a patent by simply taking the various steps of an operation or process in a different order, or by transposing the action of some of the parts, as, for example, in a brick machine, moving the clay against the cutters, instead of making the cutters move against the clay. This is only a colourable alteration (*Murray v. Clayton*, L. R. 7 Ch. 570).

When a mode of carrying a principle into effect has been invented, and the principle itself is new, then a patent can be obtained for securing, not only that particular mode, but every other mode of carrying the principle into effect. "When you have invented some mode of carrying the principle into effect," said Alderson, B., in Jupe v. Pratt (1 W. P. C. 146), "you are entitled to protect yourself from all other modes of carrying the same principle into effect."

"There never were two things to the eye more different," said Alderson, B. (1 W. P. C. 146), commenting upon the case of Crossley v. Beverley, "than the plaintiff's invention of a gas-meter, and what the defendant had done in contravention of the patent-right. The plaintiff's invention was different in form, different in construction; it agreed with it only in one thing, and that was, by moving in the water, a certain point was made to open, either before or after, so as to shut

up another, and the gas was made to pass through this opening; passing through it, it was made to revolve it. The scientific men, all of them, said, the moment a practical scientific man has got that principle in his head he can multiply, without end, the forms in which that principle can be made to operate."

And it has been held, that a patent for improvements in a known process secures those improvements to the patentee, whether applied to the process as known at the date of the patent, or to the same process altered and improved by discoveries not known at that time, so long as that process remains essentially the same (Electric Telegraph Company v. Brett, 10 C. B. 881).

"Where the thing is wholly novel, and one that has never been achieved before, the machine itself which is invented, necessarily contains a great amount of novelty in all its parts, and one looks very narrowly and very jealously upon any other machines for effecting the same object, to see whether or not they are merely colourable contrivances for evading that which has been done before." (Per Wood, V.C., in Curtis v. Platt, L. R. 3 Ch. 135 n.)

When the principle is not new, any patent taken out for a method of carrying it into effect is substantially confined to that method, and cannot be extended to other methods, because they involve some common principle applied to the common object, and may apparently be described by the same general phrase. Thus in Barber v. Grace (1 Exch. 339) it was held that the pressing of woollen goods by a set of rollers, heated within by steam, was not an infringement of a patent for a mode of pressing similar goods by two cast-iron boxes filled with steam. The jury found that the former was not a colourable variation of the latter process, and the Court, after argument, approved of the finding.

In another case the plaintiffs obtained a patent for improvements in producing impressions upon tin plates. &c., and in ovens for heating and drying plates which had received the required impressions. In an action for infringement, the plaintiffs maintained that they had for the first time manufactured a marketable article of commercial value, and that their specification covered a combination of—(1) Printing from raised surfaces with heat-resisting ink; (2) drying in an oven of a particular kind; (3) varnishing; and (4) repeating the printed and varnished plate in the oven. The defendants contended that the printing process of the plaintiffs was. according to their specification, a dry process, and that that was the basis of their patent; whilst the process used by the defendants was a damp process. was also shown that although, as a last step in the manufacture, they varnished the tin plates and put them again into an oven, this oven was not the plaintiffs' improved oven or anything like it. from a Vice-Chancellor's decree for an injunction, it was held that the defendants had not infringed the patent, since their process of printing was distinct, the oven employed was different, and the processes of varnishing and drying were not of the substance or essence of the improved method described in the specification (Flower v. Lloyd, Court of Appeal, May 18, 1877).

In considering the operation of a patent obtained for an object similar to that of a patent previously granted to another inventor, care should be taken to discriminate cases that are sometimes insufficiently distinguished, although their consequences are very different. The invention under the latter patent may comprise an improvement upon a prior patented invention; or it may be only a variation of the means there adopted to effect the given object; or it may be a distinct

method of attaining a common end. With respect to the first of these cases, it is well established that a person is at liberty to patent an improvement upon an invention which forms the subject of an existing patent, without rendering himself liable for an infringement; but he will not be able to use the improved invention before the expiration of the earlier patent unless he obtains the licence of the patentee (Lister v. Leather, 8 E. & B. 1004). In the second case, the later patent never had any validity whatever, on account of its being an invention already published, and therefore destitute of novelty though disguised by Besides this, it is an illegal colourable alterations. imitation of another man's invention, which it endeayours to evade. These points have been sufficiently discussed elsewhere in this volume. In the third case, since the inventions, that is, the means employed, are distinct, although the object is the same, the patents stand independently one of the other, provided that the earlier patent does not cover the principle common to the two, and is limited to the particular combination or method. Identity of object must not be mistaken for identity of means. The doctrine of mechanical equivalents is not applicable here. The whole apparatus may be nothing more than a particular mode of attaining a certain end, and if one man is entitled to a patent for one road to that end, any other person is on the same ground entitled to a patent for another road to the same end. For example, it had been long known that if grain were kept cool during the process of grinding, the flour was of superior quality. effect this desideratum various contrivances had been adopted, and several patents had been obtained for them, before Bovill obtained one for an invention consisting of the application of ventilating vanes or screws at the centre of the grinding-stones, by which means

air was supplied between the grinding surfaces. portable ventilating machine, blowing in a screw vane. which caused a flow of air parallel to the axis of the vane, was attached externally to the eye of the upper millstone. When the screw vane was set in motion. air was compelled to pass through the eye of the upper millstone into the centre of the two stones, and found its way out between them. Pimm subsequently took out a patent for improvements in grinding wheat. His plan for keeping the grain cool whilst grinding consisted in the removal from the centre of both stones of a large circular portion, and in the space thus obtained to place a fan, by the rapid rotation of which a centrifugal motion was given to the air, and it was driven between the stones. It was held that the latter method was no infringement of Bovill's; the two inventions were deemed independent original improvements, and each inventor was entitled to protection in respect of the method disclosed in their respective specifications, but could not claim beyond the method actually described (Bovill v. Pimm, 11 Exch. Rep. 718). And again in Curtis v. Platt (L. R. 3 Ch. D. 135 n.), Sir W. P. Wood, V. C., said: "When the object itself is one which is not new, but the means only are new, one is not inclined to say that a person who invents a particular means of doing something that has been known to all the world long before, has a right to extend very largely the interpretation of those means which he has adopted for carrying it into effect. cause, otherwise, that would be to say that the whole world is to be precluded from exercising its invention for achieving some desirable and well-known object which everybody has had in view for years. One looks more jealously at the claims of inventors seeking to limit the rights of the public at large, for effecting that which has been commonly known to all the world long

ago. Of course no patent can be taken out for effecting this as a new object, but only for effecting it by a new means. What those means may be, and what is the extent of the claim which the patentee has a right to insist upon as to those means, is often a matter of much difficulty." See also Sazby v. Clunes (43 L. J. Ex. 228); Dudgeon v. Thomson (L. R. 3 App. Ca. 34).

In the case of interfering patents, the following rule was laid down by Pollock, C. B., in Bush v. Fox (Macr. P. C. 165): "Whenever it appears that the use of a prior patent invention would be an infringement of a subsequent patent, the second patent cannot be sustained," See also Thomas v. Foxwell (5 Jur. N. s. 39), and Betts v. Menzies (1 Ell. & Ell. 1020).

When there are several distinct heads of invention, an infringement of any one renders the infringer liable to legal proceedings (Gillett v. Wilby, 1 W. P. C. 271).

COMBINATIONS.

With regard to the infringement of patents obtained for a general arrangement and combination of numerous parts, all of them old, or some old and some new, the whole in either case forming a new apparatus or machine, questions of some complication may arise, and it may not be easy to decide in a given case whether what has been done amounts to an infringement or not. A patentee may assert that although his invention as described in the specification has not been exactly copied by another person part by part, yet sufficient has been taken to bring it within the reach of the law and render him liable as an infringer. In other words, that the differences are merely colourable, and that the inventions specified by the patentee and practised by the defendant are substantially iden-On the other hand, the alleged infringer may

aver that what he has done, though directed to the same object and producing the same result, has been effected by means that were open to all the world, and that if those means are to a certain extent similar to those employed by the patentee, they yet differ so far as to render his process or apparatus a distinct and independent method of arriving at the same end, and do not constitute an illegal copy or evasion of the patentee's method. These opposite views may both be supported by witnesses of equal weight and credibility, and thus a very difficult question of fact may be placed before a jury, or submitted to the decision of a judge.

The following cases will show what rules the Courts have adopted in applying the law bearing upon the infringement of such patents.

It was decided in a case where the patentee's combination consisted of three old mechanical parts, that another person might use two of those parts and substitute hand power for the third (*Murray* v. *Clayton*, L. R. 10 Ch. 675 n.).

"Where the invention" (said Alderson, B., in the case of Newton v. Grand Junction Railway Co., 5 Exch. 334) "consists partly of what is old and partly of what is new, the combination is the subject of the patent. Therefore, a person cannot infringe that part of the patent which is old, because the public cannot be prevented from using that which they had before used in that state. If the invention consists of something new, and a combination of that with what is old, then, if an individual takes for his own, and uses that which is the new part of the patent, that is an infringement of it." See also Smith v. London and South-Western Railway Co. (Macr. P. C. 203), and Smith v. London

¹ See also the observations of *Martin*, B., in *Newall* v. Elliott (10 Jur. m. s. 954; S. C. 13 W. R. 11).

and North-Western Railway Co. (2 E. & B. 69). And in the case of Bovill v. Keyworth (7 E. & B. 725), the Court said: "Supposing the patent to be for a combination consisting of several parts for one process, we are of opinion that the defendants are liable in this action" (which was brought for an alleged infringement of the plaintiff's patent for grinding grain) "for having used a material part of the process, which was new, for the same purpose as that mentioned in the specification, although they did not at the same time use all the parts of the process so specified."

In the case of Sellers v. Dickenson (5 Exch. Rep. 312), Pollock, C. B., said: "The argument addressed to us was, that this is a patent for a combination of old and new mechanism, and the defendant not having used the combination, there can be no infringement. But that is not so. There may be an infringement by using so much of a combination as is material: and it would be a question for the jury, whether that used was not substantially the same thing. . . . I think it may be laid down as a general proposition . . . that if a portion of a patent for a new arrangement of machinery is in itself new and useful, and another person. for the purpose of producing the same effect, uses that portion of the arrangement, and substitutes, for the other matters combined with it, another mechanical equivalent, that would be an infringement of the patent."

The case of *Iister* v. Leather (8 E. & B. 1004; S. C. in error, ibid. 1032) arose out of the alleged infringement of a patent for a carding machine obtained by the plaintiff in 1850. At the trial of the action the evidence was strong to show that a material part of the process used by the defendant was identically the same with that specified by the plaintiff, and that the combination of mechanism used by the defendant for per-

forming a certain part of the process was essentially the same as that described in the plaintiff's specifica-Lord Campbell, before whom the case was tried, told the jury that the plaintiff's patent was for the whole combination for the whole process as specified, but that the defendant might be guilty of an infringement without using the whole combination. Objections were taken to this ruling, and it was argued in the Court of Error that the taking of a part is either no infringement of a patent for a combination, or if it is, the patent for the combination is void unless every part is "But," said Lord Campbell, in delivering the judgment of the Court, "all the points made for the defendant here were made and overruled in the three cases which decide that a patent for a whole combination may be infringed by taking a part, provided that is a new and material part of the combination." His Lordship then proceeded to comment on the cases of Sellers v. Dickenson, Newton v. Grand Junction Railway, and Smith v. London and North-Western Railway Co., cited above, and continued:-"The principle in all these cases is the same as that laid down to the jury in the present case, and they establish that a valid patent for an entire combination for a process gives protection to each part thereof that is new and material for that process, without any express claim of particular parts, and notwithstanding that parts of the combination are old."

In Parkes v. Stevens (L. R. 8 Eq. 258), James, V. C., stated the law on this branch of the subject as follows: "The law is summed up thus; the cases establish that a valid patent for an entire combination for a process gives protection to each part thereof that is new and material for that process, which is nothing more than stating in other words that you not only have no right to steal the whole, but you have no right to steal any

part of a man's invention; and the question in every case is a question of fact—is it really and substantially a part of the invention? Supposing that a clock was now for the first time invented and patented as a machine for measuring and indicating time, a man could not evade the patentee's right by substituting a spring for a weight, or by leaving out the whole of the striking apparatus." See also Walton v. Potter (1 W. P. C. 586); Thorn v. Worthing Skating Rink Company (L. R. 6 Ch. D. 415 n.); and Harrison v. Anderston Foundry Co. (L. R. 1 App. Ca. 574).

In The Bottle Envelope Co. v. Seymour (5 Jur. N. s. 174, C. P.), it was said by the Court that the infringement of any part of a patent process is actionable if that part is of itself new and useful, so as that it might be the subject-matter of a patent, and is used by the infringer to effect the object or part of the object proposed by the patentee. And in Parkes v. Stevens (L. R. 8 Eq. 358), James, V. C., held that a patent for a combination will not cover any part which would not be of itself patentable. In deciding this case the learned judge made these remarks on the case of Lister v. Leather, cited above: "The authority of that case has been pressed upon me as if it really established this, which would be a most startling proposition, that a patent for a combination or arrangement would be a distinct patent for everything that was new and material, and that went to make up the combination. The marginal note, if read hastily, is calculated to give some colour to that contention. But if the judgment be read it will be found to give no warrant whatever for such, I must call it, baseless notion. . . . It was contended (in the case before the judge) that because it (a sliding door) was as alleged a novel part of a novel combination (forming a lamp), it was protected. To say that a patent for an entire combination is a valid patent for a part when that part would not of itself have been patentable is in my judgment a reductio ad absurdum of the supposed principle in Lister v. Leather."

The case of Saxby v. Clunes (43 L. J. Ex. 228), arose out of the alleged infringement of a patent for a mode of working the points and signals of railways. When it went on appeal to the House of Lords, Lord Chelmsford said that although the defendant's invention was a great improvement upon the plaintiff's, yet if, in carrying it out, the former made use of any part of the invention to which the plaintiff's patent extended, and which was new and material, it was an infringement. See also the case of White v. Fenn (15 W. R. 348).

In the case of Harrison v. Anderston Foundry Co. (L. R. 1 App. Ca. 574), Lord Cairns, L. C., said: "If it is clear that the claim is for a combination and nothing but a combination, there is no infringement unless the whole combination is used, and it is in that way immaterial whether any or which of the parts are new." See also Dudgeon v. Thomson (L. R. 3 App. Ca. 34), and Murray v. Clayton (L. R. 10 Ch. 675 n.).

When the case of Clark v. Adie, which arose out of an alleged infringement of a patent for improvements in apparatus for clipping horses, was taken on appeal to the House of Lords (L. R. 2 App. Ca. 315), Lord Cairns, L. C., made the following general remarks on infringements of patents for inventions of this nature:

(1) "One mode of infringement would be a very simple and clear one; the infringer would take the whole instrument from beginning to end, and would produce a clipper made in every respect like the clipper described in the specification. About an infringement of that kind no question could arise."

(2) "The second mode would be one which might

occasion more difficulty. The infringer might not take the whole of the instrument, but he might make an instrument which in many respects might resemble the patented instrument, but would not resemble it in all its parts. And there the question would be, whether that which was done by the alleged infringer amounted to a colourable departure from the instrument patented, and whether in what he had done he had not really taken and adopted the substance of the instrument patented." (3) "But there is a third way in which it is possible to conceive an infringement of a patent of this kind. Inside the whole invention there may be that which in itself is a minor invention, and which does not extend to the whole, but forms only a subordinate part or integer of the whole. Now again, that subordinate integer may be a step or a number of steps in the whole, which is or are perfectly new; or the subordinate integer may not consist of new steps, but may consist of a certain number of steps so arranged as to form a novel combination within the meaning which is attached by the patent law to the term 'combination.'.... In a patent of that kind the monopoly would or might be held to be granted not only to the whole and complete thing described, but to those subordinate integers entering into the whole which I have described. But then the invention must be described in that way; it must be made plain to ordinary apprehension upon the ordinary rules of construction that the patentee has had in his mind and has intended to claim protection for those subordinate integers." Proceeding to apply these principles to the case before the House his lordship said: "I cannot find from beginning to end of the specification any sentence or any number of sentences, as to which, by any reasonable interpretation. you can say that they make a claim to a subordinate

combination of these particular items as constituting in itself a novelty, a new manufacture, a thing to be protected by the patent."

On a review of the preceding cases it will be seen that the latitude of the earlier decisions has been gradually narrowed, and the following propositions appear to be established by the later ones.

If the claim is solely for a combination, there is no infringement, unless the entire combination is taken. To protect subordinate parts or minor combinations, it is necessary to claim them, even when new and material. Subordinate parts and minor combinations when claimed must be new, useful, and patentable per se. The decision in any controversy, whether a combination has been infringed under cover of specious alterations, such as the substitution of mechanical equivalents, or whether what is charged as an infringement is a different and independent machine, contrivance or process, will depend upon the preponderance of the evidence in each case.

It has been decided that the application of a new and material part of an arrangement to a purpose different from that to which it is applied in the patented combination does not infringe the patent (Lister v. Eastwood, 9 L. T. N. s. 766; McCormick v. Gray, 7 H. & N. 25).

In Newall v. Elliott (10 Jur. N. s. 954; S. C. 13 W. R. 11) a patent for an invention of improvements in apparatus employed in laying down submarine telegraph cables which consisted of an internal cone placed in the eye of the coil of cable, an external cylinder round the coil and rings suspended over it (see the claim, ante, p. 15), was held not to have been infringed by an apparatus in which the cable was coiled round a cylinder and prevented from slipping by means of a cylinder placed outside, it being found that this had

been done before for the purpose of safe carriage, and there being no evidence that the defendants used their apparatus for any other purpose.

CHEMICAL PROCESSES AND PRODUCTS.

Precisely the same rules of law are applicable to the case of chemical as to the case of mechanical inventions, although more difficulty is sometimes felt in dealing with that class of invention, in consequence, perhaps, of an acquaintance with the elements of chemistry being less generally diffused than an acquaintance with the principles of mechanics. The chief questions will continue to be, Has the new principle discovered and applied by the patentee, or his new method of carrying out a known principle, or his new combination of parts or ingredients, been borrowed by the alleged infringer?

In Stevens v. Keating (W. P. C. 2, 188) it was a question whether the use of borax (a compound of boracic acid and soda) was not an infringement of a patent, the specification of which claimed the use of acids and alkalies in the preparation of cements. Both Lord Cottenham and Pollock, C. B., held that it was an infringement.

In Hancock v. Moulton (June, 1852), an application to the Court of Chancery for an injunction to restrain the manufacture by the defendant of vulcanized or cured caoutchouc, alleged to be an infringement of the plaintiff's patent, it appeared that this patent was for obtaining a certain useful product by subjecting a mixture of sulphur and caoutchouc to heat. The mixture was first made mechanically, and then, by the operation of heat, the character of the caoutchouc was changed so that it ceased to be liable to stiffen from cold, it was not decomposed by heat, and it was improved in elasticity. The patent extended to the in-

corporation of sulphur, and of sulphur only, with the caoutchoug by means of heat. The defendant subsequently obtained a patent for the combination of hyposulphate of lead and artificial sulphuret of lead with caoutchouc; that combined mass, acted upon by heat, was alleged by the defendant to produce more beneficial results, but the results were of the same character as those which were produced by the plaintiff's patent. "Assuming," said Turner, V. C., "the materials thus used by the defendant to be different, the process of the defendant would per se be no infringement of the plaintiffs' patent. The plaintiffs confined their patent to sulphur; the defendant had used hyposulphate of lead and artificial sulphuret of lead. But it was alleged by the plaintiffs that the materials were not in truth different, or at least that the materials which produce the result are the same. It was said that sulphate and sulphuret of lead do not of themselves produce the change, but that the change is produced by the sulphur which they contain, and which forms one of their several constituent parts; and that those parts being decomposed by heat, the sulphur combined with the caoutchouc and left a residuum of lead, which had no operation in the change which was effected. If the qualities conferred upon the caoutchouc by the process were imparted by the sulphur, it would no doubt be an infringement of the plaintiffs' patent." The judge's opinion, after examining the evidence, was, that the evidence preponderated very considerably in favour of the plaintiffs.

The case of Talbot v. Laroche deserves attentive study, for the questions raised in it as to the substitution of one chemical equivalent for another. The plaintiff was the inventor of the photographic process, for which he obtained a patent in 1841. The specification claimed, amongst other things, the employment of

gallic acid or tincture of galls, in conjunction with a solution of silver, to render paper more sensitive to the action of light; and also the making visible photographic images upon paper by washing them with liquids (meaning only, as other parts of the specification showed, gallo-nitrate of silver), which act upon those parts which had been previously acted on by Subsequently to the date of this patent, the collodion process was discovered, and the defendant having practised it, the plaintiff brought this action, alleging that this process was an illegal copy of his process. It was argued by the defendant-firstly, that the plaintiff had claimed only the rendering of paper more sensitive to light; whereas collodion, the substance he employed, was a different thing, being a solution of gun-cotton in ether; secondly, that when the collodion was put into the camera, it contained no gallic acid, a material essential to the plaintiff's process; thirdly, that in developing the image, he employed pyrogallic acid, and not gallic acid. scientific persons gave evidence that collodion was not only a different material from paper, calling into play processes not needed when paper was employed, but that it possessed peculiar photographic properties, as was proved by the fact that no gallic acid was required to render it sensitive, as in the case of paper; also, that pyrogallic acid was much more rapid in its action than gallic acid, and that it was, in many respects. a different thing from gallic acid. The questions submitted by the judge to the jury upon this part of the case were these: Is the use of collodion with nitrate of silver and iodide of potassium the same as the use of paper prepared with nitrate of silver, iodide of potassium, and gallic acid? Is pyrogallic acid the same as. or a chemical equivalent for, gallo-nitrate of silver? The jury returned a verdict implying that, in practising

the collodion process, the defendant had not infringed the plaintiff's process.

The difficulty that sometimes exists in determining whether one chemical process is, in contemplation of law, distinct from, or an illegal copy of another, is exemplified in the history of the case of *Heath* v. *Unwin*.

Under a patent for improvements in the manufacture of iron and steel, the patentee claimed "the use of carburet of manganese in any process whereby iron is converted into cast-steel;" and his specification stated, that the invention consisted in adding from one to three per cent. of the carburet to iron or blistered steel whilst in the crucible. The carburet of manganese was separately prepared, by subjecting oxide of manganese and carbonaceous matter to a strong heat, and the resulting carburet was then added to the crucible containing the metal to be converted into cast-steel. Upon the trial of an action for an infringement, it appeared that the defendant did not use any single substance answering to the description of carburet of manganese: but he placed in the crucible, containing the iron or blistered steel, some oxide of manganese and carbonaceous matter. These two substances would form during the process of conversion, and before actual union with the melted iron, carburet of manganese in a state of fusion; but the quantity of the carburet so formed was less than one per cent. of the weight of iron in the crucible. was held by the Court of Exchequer, that since the defendant had not contemplated the use of carburet of manganese, and had not known prior to the investigation that took place in consequence of the action, that the result of his adding the oxide and carbon was to produce the carburet—since, moreover, the patentee had expressly stated his invention to be the addition of the substance called carburet of manganese to the crucible, there was no infringement on the part of the defendant, for there was no imitation of the patentee's process behind a colourable variation. The specification was construed as claiming the use of one particular combination of carbon and manganese, namely, the carburet of that metal; and a particular mode of using that combination, namely, by putting a certain quantity by weight, in an unmelted state, into the crucible.

Heath v. Unwin subsequently went before the Court A majority of the judges of of Exchequer Chamber. that Court held that, inasmuch as the plaintiff had not limited his claim to the particular mode of using the carburet described in his specification, the defendant's process was an infringement of the patented invention, since it effected the manufacture of cast-steel by the employment of either carburet of manganese, or a chemical equivalent. A minority of the judges thought that the defendant had not infringed the patent; for, though he had used a chemical equivalent for the carburet of manganese-viz. its component parts-it was not known at the date of the patent that such component parts were equivalent to the carburet, in such special applications of it as were described in the specification, and for the purpose there mentioned. Moreover, they thought that the defendant's process was an improvement upon the plaintiff's, for the same quality of steel was made at less expense, one crucible and one heating effecting the desired result.

When this extraordinary case came before the House of Lords, the judges were called upon to attend the argument, and give their opinions. Eleven judges attended, seven of whom concurred with the Court of Exchequer Chamber, and four disagreed. Notwithstanding this large majority, the two law lords who heard the case (Lord Cranworth and Lord Brougham) gave judgment for the plaintiff in error, thereby de-

ciding that Heath's patent had not been infringed. "I think," said Lord Cranworth, "that the use of substances thus producing carburet of manganese in a state of fusion was no violation of the patent. substance for the use of which (inter alia) the patent was granted was a solid metallic substance capable of being broken into fragments, and weighed, so that certain definite quantities might be put into the crucible with the steel. There is no evidence whatever tending to prove that, at the date of the patent, it was known to persons acquainted with the subject of manufacturing steel, that coal-tar and oxide of manganese would be a chemical equivalent for the carburet of manganese claimed by Heath. Indeed it is obvious that the discovery of such an equivalent was made after the use of the carburet, as a distinct metallic substance, had been some short time in operation. It was itself a most valuable discovery, and would have legitimately formed the subject of a new patent. The costly nature of the substance claimed in the patent might, and probably would, have prevented its use altogether; and if, at the date of the specification, it was known to Heath, that by the use of two common substances, well known in commerce, more than one hundredfold cheaper than carburet of manganese, the same results precisely would be obtained, as by the use of that material, the specification would have been bad, as not truly disclosing the invention. On the short ground, therefore, that the invention claimed is for the use of a particular metallic substance, viz. carburet of manganese in certain definite proportions, according to the weight of the steel under fusion, and that no such substance, nor any equivalent for it, known to be such at the date of the specification, was used by the defendant, I think that there was no evidence of infringement" (5 H. L. C. 505, 543).

On the trial of Muntz v. Foster (2 W. P. C. 96), an action brought for the infringement of a patent for an improved manufacture of metal plates for sheathing the bottoms of ships, it appeared that the patentee claimed the invention of an alloy of 60 per cent. of copper and 40 per cent. of zinc—the copper and zinc being of the best quality—which alloy could be rolled at a red heat into sheets that furnished a sheathing for ships which was more durable, under the corrosive action of salt water, than copper sheathing; whilst it oxidated sufficiently to keep the ship's bottom clean from barnacles, and other things that impeded the ship's progress. A patent had been obtained in 1800, by one Collins, for an invention of a preparation or application of sundry articles or materials, to be used chiefly for the preservation of shipping or marine purposes, the specification of which described, amongst other things, a mixture of 100 parts copper and 80 parts zinc-i.e. 55½ per cent. of copper and 44½ per cent. of zinc-which was to be extended into proper form by rolling. The two inventions, on their faces, seemed to be substantially the same; but the following arguments were used to prove a difference. Collins stated that other metallic substances might be added to the alloy compounded of copper and zinc; whereas Muntz alleged that foreign ingredients would destroy the value of his composition. Collins stated that a good composition might be made of 551 per cent. of copper and 441 per cent. of zinc; whereas Muntz alleged, that 60 per cent. of copper and 40 per cent. of zinc were the precise proportions required to produce the best metal for sheathing, and that a variation of one or two parts of copper or zinc, on one side or the other, made a very material difference in the result. it was alleged on the part of Muntz, that, at the time of Collins' invention, neither copper nor zinc existed

of the purity required for the successful production of an alloy as suitable as Muntz's for ship-sheathing; and that before his invention it was not possible to obtain a metal which would roll hot or cold, and could at the same time serve for sheathing. The defendants alleged, that the sheathing made by them was the result of following the directions of Collins' specifica-Lord Lyndhurst, on the hearing of an appeal from an order of Vice-Chancellor Knight Bruce, said he was satisfied that the object could not be accomplished by uniting ordinary copper and zinc according to Collins' process. The defendants must, therefore, have originally used, not the ordinary, but the purest quality of the two metals, or they must have purified them in the course of the process, by some mode not suggested in Collins' specification. In one case, the invasion of Muntz's invention was plain and direct; in the other, it was colourable and indirect. Furthermore, witnesses stated that no person could make the compound material by following Collins' directions. The jury found a verdict for the plaintiff, the judge having taken a favourable view of Muntz's case in his address to the jury (2 W. P. C. 94, 112).

It has been decided that the application of a natural mineral substance to effect a given purpose is not an infringement of a patent obtained for the application to the same purpose of an artificial substance having the same chemical constitution. A patent was obtained for a process of purifying coal gas by means of hydrated oxide of iron, and the method of obtaining that material artificially was described in the specification. The use of a natural substance called bog ochre, containing oxide of iron, was held not to be an infringement of the patent. The specification also described and claimed a mode of revivifying the artificial oxide for subsequent use in the same way. Lord

Westbury, O., granted an injunction to restrain the user of the natural substance after it had been revivified by the process described in the patent. (Hills v. Liverpool Gas Company, 9 Jur. N. s. 140.)

In those cases where the invention consists of the employment of a material composed of several ingredients, and the inventor has stated the most suitable proportions known to him, another person will not be allowed to evade the patent by employing somewhat different proportions. (Patent Type Founding Company v. Richard, Johns. 381.)

In determining the question of infringement, the intention of the infringer is immaterial; if he violate the patentee's rights he renders himself liable to make compensation, although he acted in ignorance. In the case of Stead v. Anderson (2 W. P. C. 156), Wilde, C. J., when delivering the judgment of the Court of Common Pleas, said that, "in the action of Heath v. Unwin, the Court of Exchequer seems to have deemed it material to consider the intention of the defendant, in determining whether he had infringed a patent. But, in that case, the evidence negatived any such intention, and the other circumstances of the case were not such as to show an infringement; so that there was no evidence as to what the effect of such intention would be, and we think it clear that the action is maintainable in respect of what the defendant does, not what he intends." And Shadwell, V. C., said, in Heath v. Unwin (15 Sim. 553), "I am at a loss to see how the want of intention can be any answer where the act complained of is an injury. The party complaining of the act is not the less prejudiced by it because it was committed unintentionally, and my opinion is that if a party has done an act that is injurious to the rights of another (though without any intention of doing him an injury) he is answerable for the consequences."

In a subsequent stage of the case of Heath v. Unwin it was admitted by Mr. Baron Parke that the Court of Exchequer had been in error when it took the intention of the alleged infringer into consideration, adding, "There may be an indirect infringement as well as a direct one, though the intention of the party be perfectly innocent, and even though he may not know of the existence of the patent itself" (25 L. J. C. P. 19). See also Wright v. Hitchcock (L. R., 5 Exch. 37). But where a retail dealer had, in ignorance of the plaintiff's rights, sold to an agent of the plaintiff an article made in infringement of the patent, and the article itself showed from whom its vendor had bought it, and the Court was satisfied that the infringement was innocent, accidental, and trivial, and not such as to have produced any substantial damage to the plaintiff, James, V. C., dismissed a bill for an injunction (Betts v. Willmott, 18 W. R. 946). The case went afterwards on appeal before Lord Hatherley, C., who affirmed the decision, but upon other grounds (L. R. 6 Ch. 239).

To construct a patented machine simply as an amusement or as a model is not an infringement of the patent (Jones v. Pearce, 1 W. P. C., 125); nor is the making of the patented article for the simple purpose of bonâ fide experiment (Frearson v. Loe, L. R. 9 Ch. D. 48); and if a person makes use of a patented process and obtains the product, not for the purpose of commercial profit, he is not guilty of infringing the patent. Thus Higgs obtained a patent for a process of precipitating, by

means of hydrate of lime, the animal and vegetable matters suspended in sewage water, with a view to their use as manures. Godwin employed the same process, but solely for the purpose of purifying the sewage water, and he derived no profit from the product. was held that the patent was not infringed (Higgs v. Godwin, E. B. & E. 529). But if the patented articles. though made only for experiment, are made and used for profit, or with a view of obtaining profit even to a limited extent, the patent will be infringed. where a defendant had made a screw-making machine in infringement of one patent, and in order to try the machine made a few screws of a description covered by another patent, and made such screws with the view of trying the screws themselves, he was held to have also infringed the latter patent (Frearson v. Loe, L. R. 9 Ch. D. 48).

Proof of the sale of an article shown to have been made in the same way as that for which a patent has been obtained, such sale being without the leave, expressed or implied, of the patentee, is primâ facie evidence of an infringement (Gibson v. Brand, 1 W. P. C. But this will not be so in the absence of proof that the article was made according to the patented Thus, on the trial of an action for an infringement, a candle with a plaited wick, made by the defendant, and sold at his manufactory, was produced to the jury as evidence that he had infringed the It was held that, as the patent was not for the candle itself, but for the mode of manufacturing it, the mere production of a candle similar to the plaintiff's was no evidence that it had been made by his patented It should have been shown how the candle had been made, seeing that it was quite possible the same result had been produced by a different method (Palmer v. Wagstaff, 8 Exch. 840; 9 Exch. 494).

A licence to A. to manufacture a patent article is an authority to his vendees to vend it without the consent of the patentee (*Thomas* v. *Hunt*, 17 C. B. N. s. 183).

The point whether a mere exposure or offering for sale of a patented article amounts to an infringement, in the absence of proof of actual sale, seems to have been decided differently in the cases of *Minter* v. *Williams* (1 W. P. C. 137) and *Ozley* v. *Holden* (5 C. B. N. s. 667). In *Muntz* v. *Foster* (2 Web. P. C. 101), *Tindal*, C. J., held that the making of ten tons of metal sheathing was an infringement, although no sale was proved.

The sale of articles manufactured according to a patented process, whether such articles have been made in this country (Wright v. Hitchcock, L. R. 5 Ex. 37), or have been imported from abroad, is an infringement of a patent (Walton v. Lavater, 8 C. B. N. S. 162, Elmslie v. Boursier, L. R. 9 Eq. 217), unless the circumstances are such that the patentee is bound to prove not only the sale, but that the article was not made and sold by himself or his agents (Betts v. Wilmott, L. R. 6 Ch. 239). In this case, a patentee having manufactories both in England and on the Continent, filed a bill against a druggist to restrain him from infringing his patent for metallic capsules, the infringement consisting of the sale of a bottle of French toilet vinegar having a capsule attached similar to those manufactured under the patent, but the bill was dismissed (and on appeal Lord Hatherley, C., upheld the Vice Chancellor's decision) on the ground that the plaintiff had not shown that he had not himself sold through his house in Paris the very article the use of which he sought to prohibit. A sale of the article by the patentee in one country would imply a right to use it in another.

The user in this country of a patented article made

abroad is illegal, even when such user is merely of a passive nature, and takes place in the course of transit from one foreign country where the articles have been made to another to which they are consigned (Betts v. Neilson, 6 N. R. 221, affirmed on appeal, ibid. 361: 3 De G. J. & D. 82; L. R. 3 Ch. 431; L. R. 5 H. L. 1). In this case, bottles of beer sent from Scotland protected by capsules contravening an English patent were transhipped in an English port for convenience of exportation to India. It was held, first, by Wood, V. C., and afterwards by the Court of Appeal and the House of Lords, that as the capsules were necessary for the preservation of the beer, there had been a user of the invention in England, and an injunction was granted. But his Honour said he could well conceive a case in which there would be no user in England, as, for instance, foreign tools infringing an English patent, packed up in boxes and lying inert, or transhipped in course of transit in an English harbour (6 N. R. 222). Caldwell v. Van Vlissengen (9 Hare, 415, 428), where the user was an active use; and on the general question of infringement by user, The Universities of Oxford and Cambridge v. Richardson (6 Ves. 689); Minter v. Williams (1 W. P. C. 137).

There is a right of property in an article made in infringement of a patent; and therefore, where a foreign sovereign had bought abroad articles made in infringement of an English patent, and they were brought to England to be placed on board a ship of war belonging to the foreign sovereign, it was held that, as the Court had no jurisdiction to interfere with the property of a foreign sovereign, it could not prevent him from removing the articles in question (Vavasseur v. Krupp, L. R. 9 Ch. D. 351).

When a patent is for a new combination of machinery, every part being old, it may be that the manu-

facture of the separate parts in this country, and the exportation of them abroad, will be no infringement; but it is clearly otherwise when the part so made and exported is new and is claimed as new (Goucher v. Clayton, 11 Jur. N. s. 462, 465).

A patent for the United Kingdom, the Channel Islands, and the Isle of Man, will not be infringed by acts done on board a British vessel at Malta or on the high seas (Newall v. Elliott, 4 N. R. 429).

By the twenty-sixth section of the Patent Law Amendment Act, 1852, the use of an invention for which British letters patent have been obtained in any foreign vessel, or for the navigation of any foreign vessel, which may be in any port of the Queen's dominions, or in any of the waters within the jurisdiction of any of the Queen's Courts, shall not be deemed an infringement of such letters patent, where such invention is not used for the manufacture of any commodities to be vended within or exported from the Queen's dominions.

In the important case of Feather v. The Queen (6 B. & S. 257) it was decided that as all grants made by the Crown must be construed favourably to the grantor and adversely to the grantee, there is nothing in the ordinary form of Letters Patent to debar the Crown from using the invention comprised therein, and consequently that the Crown has a right either by itself or by its officers, agents, or servants, to exercise such invention and manufacture the patented object without paying royalties or compensation.

However, in Dixon v. The London Small Arms Company (L.R. 1 App. Ca. 632), where a manufacturing company had entered into a contract with the Government for the supply of a patented article for the public service at a fixed price, and in pursuance thereof had manufactured the article without the patentee's licence, and delivered the same and received payment, it was held

by the House of Lords that the manufacturers were not in the position of servants or agents of the Crown, although they had received an indemnity from the Government against the claims of the patentee; and therefore that they were not entitled to the privilege of the Crown against a patentee, but were liable to an action for an infringement of the patent. See also Vavasseur v. Krupp (L. R. 9 Ch. D. 351).

The seventh section of the statute 5 and 6 Will. IV., cap. 83, imposes a penalty of £50 upon any person marking on things made, used, or sold by him, the name, or any imitation of the name, of the patentee, without leave in writing from him or his assigns. A like penalty is imposed on a person marking such thing with the word "patent," the words "letters patent," or the words "by the king's patent," not having purchased it from or under the patentee, or not having obtained his licence in writing so to do; and a person imitating or counterfeiting the stamp, mark, or device of a patentee is subjected to a like penalty. See Myers v. Baker (3 H. & N. 802).

CHAPTER XV.

THE ACTION OF SCIRE FACIAS.

A FEW words of explanation must be afforded as to the action of scire facias, although this form of action has fallen into almost entire disuse.

This action is one brought in the name of the Crown. for the purpose of repealing a grant of letters patent, and its name is derived from two Latin words, contained in the original writ, when that language was employed in legal proceedings. Sir Edward Coke tells us, in his fourth Institute, that "when the king granteth anything that is grantable upon a false suggestion, the king, by his prerogative jure regio, may have a scire facias to repeal his own grant;" and that "when the king doth grant anything which by law he cannot grant, he jure regio (for the advancement of justice and right) may have a scire facias to repeal his own letters patent." And now, not only is the Crown entitled to move in such a matter of its own will, but any one of the public has the right to call for the issue of the writ, in the name of the Crown, since a void or illegal patent is a wrong to the community.

The proceedings by scire facias commence and terminate in the Court of Chancery; for as the object in view is the repeal of a document to which the great seal has been attached, the Lord Chancellor only has the power to cancel so important a document, and to remove the seal therefrom. At a certain stage of the proceedings, however—that is to say, when issues of fact have been raised, which require to be decided by

a jury, they are shifted into the Queen's Bench Division. and the trial takes place either at bar, or more usually before a judge at Nisi Prius. The original writ contains the "suggestions" of the prosecutor, or his legal reasons for seeking to repeal the patent; and the defendant either allows judgment to go against him by default, whereupon the patent is avoided, or he files pleas which raise the issues to be decided by a trial. The proceedings at the trial are, for the most part. similar to the proceedings in other actions where the validity of letters patent is in dispute—with this important exception, however, that whereas, in the action for an infringement, the defendant can put the patentee to primâ facie proof of his case, in the case of an action of scire facias, the burden of prima facie proof lies upon the prosecutor, who must begin the trial by showing the truth of the suggestions of the writ, e.a. that the patentee is not the true and first inventor, that the invention was not new at the date of the patent, &c. If the Crown obtains judgment, the letters patent become wholly void, and must be produced to the Court of Chancery to be cancelled.

The prosecutor, before being allowed to obtain the writ of scire facias, must give a bond conditioned to pay the defendant his costs if he shall obtain a verdict and judgment in the action.

In case the patentee has assigned the patent, the writ must issue against the assignee. It should be kept in mind that a patentee or assignee is entitled to file a disclaimer of any part of his specification after the issue of the writ of scire facias, and to put the disclaimer in evidence at the trial, by which proceeding he may possibly put the prosecutor out of Court by depriving him of his ground for attacking the patent. (See the chapter on Disclaimers.)

CHAPTER XVI.

THE COMMISSIONERS OF PATENTS AND THEIR OFFICE.

Previous to the passing of the Patent Law Amendment Act of 1852, the business relating to patents was transacted at several Government offices. To the great convenience of the public it is now wholly transacted at one, namely, the Office of the Commissioners of Patents, with which is combined that branch of the Court of Chancery termed the Great Seal Patent Office. The Commissioners of Patents themselves were called into existence by the same Act. They consist of the Lord Chancellor, the Master of the Rolls, the Attorneys-General for England and Ireland, the Lord Advocate and the Solicitors-General for England, Scotland, and Any three of them (the Lord Chancellor or Master of the Rolls being one) may act in the name and with the powers of the whole. The Commissioners have a seal of office, whereof all courts and judges are to take notice. They have power to make rules and regulations respecting the business that comes before them, and they have annually to present a report of their proceedings to Parliament. A library, consisting of the scientific and mechanical works of all nations. has been established in connection with the office, and this is open to the public. From the same office issues twice a week, a publication, called The Commissioners of Patents' Journal. It contains a reprint of the notices relating to patents which have appeared in the London Gazette, and other matters connected with the business of the office.

Two very useful registers, accessible to the public on payment of a shilling, are kept at the office of the Commissioners for Patents. One is called the Register of Patents, wherein is recorded, in chronological order and with the dates, all patents granted under the Patent Law Amendment Act, 1852, as well as the deposit or filing of specifications, disclaimers, memoranda of alterations, amendments, confirmations, and extensions, and the expiry, vacating, and cancelling of patents. The other register is called the Register of Proprietors. It contains entries of the assignments of patents, or of any share or interest therein; and of licences, mentioning the districts to which they relate, with the names of persons having shares or interests in patents and licences, and the dates at which such shares or interests were acquired. Copies of entries. certified by the Commissioners, may be obtained on payment of small fees, these certified copies being directed to be received in evidence in all courts and in all proceedings, and to be taken as prima facie proof of the assignment, &c., as therein expressed. It is provided by the Act of 1852, that until such entry shall have been made, the grantee of the patent shall be deemed and taken to be the sole and exclusive proprietor of the patent (sect. 35). Entries may be expunged, vacated, or varied by a judge's order under The making false entries in the Register of sect. 38. Proprietors, the forging of any writing purporting to be a copy of any entry in such register, and the tendering in evidence of any such forged writing by any one who knows it to be forged, are made misdemeanours. punishable by fine and imprisonment, by sect. 37 of the Patent Law Amendment Act, 1852.

Printed copies of all the specifications filed under the Patent Law Amendment Act, 1852, and of all specifications enrolled previously to the passing of the said Act, are purchasable for a small sum at the Commissioners' Office, with lithographed outline copies of the drawings accompanying such specifications. Disclaimers and memoranda of alteration are likewise printed and published.

Alphabetical indexes of all the specifications of patents enrolled in Chancery, from 1617 to the latest available date, have been published under the authority of the Commissioners; as also an index arranging the specifications according to the subject-matter, and supplemental indexes continue to be published annually. Chronological indexes of patents, from the earliest date to the year 1875, have also been published. index, called the "Reference Index of Patents," points out the office in which each enrolled or filed specification of a patent may be consulted; the books in which specifications, law proceedings, and other subjects connected with inventions, have been noticed; also, such specifications as have been published under the Commissioners' authority. These indexes are of great service in tracing the history of inventions.

The Commissioners also publish volumes containing Abridgments of specifications arranged chronologically in classes. The whole of the publications of the Commissioners are open to the inspection of the public at the library before referred to, where may also be consulted all the leading British and foreign scientific journals and text-books in the various departments of science and art. Copies of the Commissioners' publications are also presented to the principal Public Offices, Seats of Learning, Societies, Institutions, Libraries, British Colonies, and Foreign States.

In addition to the office of the Commissioners in London, the Act directs that they shall have offices at Edinburgh and Dublin, to which copies of all specifications, &c., shall be transmitted for the inspection of the public. (Sect. 39, Patent Law Amendment Act, 1852.) Certified duplicates of all entries made in the Register of Proprietors are directed by sect. 35 to be sent to these offices for public inspection.

Transcripts of letters patent are transmitted to the Director of Chancery in Scotland, to be recorded in the records of Chancery there; and extracts from the same are procurable, on payment of certain fees, which extracts are receivable in evidence in all courts of Scotland, to the like effect as the letters patent themselves. (Sect. 18.) Similar transcripts are sent to Dublin, for enrolment in the Irish Court of Chancery. When this has been done, the transcript or exemplification has the like effect as if the original letters patent had been enrolled there. (Sect. 29.)

Certified printed copies, under the seal of the Commissioners, of all specifications, and complete specifications, and fac simile printed copies of the drawings accompanying the same, also of disclaimers, &c., filed under the Patent Law Amendment Act, are directed (sect. 5 of 15 & 16 Vict. c. 115) to be sent to the office of the Director of Chancery of Scotland, and to the enrolment office of the Irish Court of Chancery, within twenty-one days of the filing; and certified copies, or extracts from such documents, are procurable by any person on payment of certain fees. These copies or extracts can be given in evidence in all courts in Scotland and in Ireland respectively, in proceedings relating to patents for inventions, without further proof or production of the originals.

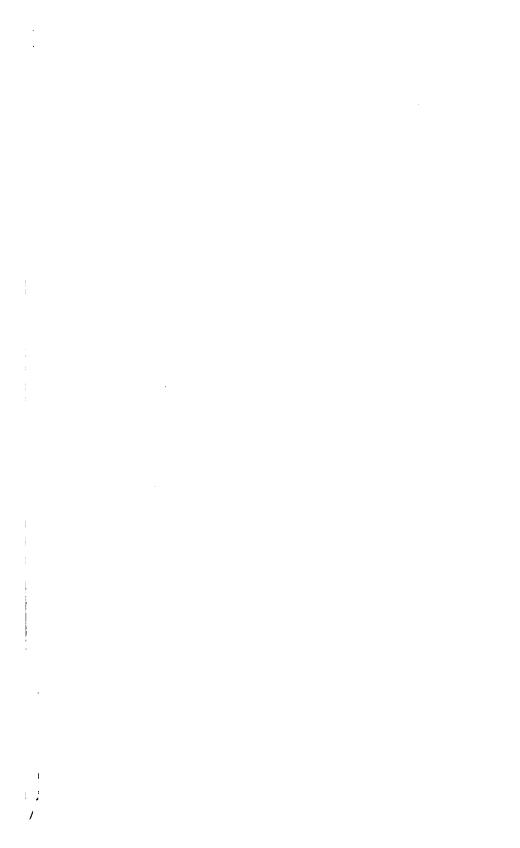
APPENDIX.

PART I.

STATUTES, RULES, AND FORMS.

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APPENDIX.

PART I.

STATUTES.

21 Jac. I. c. 3. [A.D. 1623.]

An Act concerning Monopolies and Dispensations with Penal Laws, and the Forfeitures thereof.

FORASMUCH as your most excellent Majesty, in your royal Monopolies, etc., judgment, and of your blessed disposition to the weal and laws of the quiet of your subjects, did in the year of our Lord God 1610, realm. publish in print to the whole realm, and to all posterity, that all grants and monopolies, and of the benefit of any penal laws, or of power to dispense with the law, or to compound for the forfeiture, are contrary to your Majesties laws, which your Majesties declaration is truly consonant and agreeable to the ancient and fundamental laws of this your realm: And whereas your Majesty was further graciously pleased expressly to command that no suitor should presume to move your Majesty for matters of that nature; yet nevertheless, upon misinformations, and untrue pretences of public good, many such grants have been unduly obtained, and unlawfully put in execution, to the great grievance and inconvenience of your Majesties subjects, contrary to the laws of this your realm, and contrary to your Majesties most royal and blessed intention so published, as aforesaid; for avoiding thereof, and preventing of the like to come, may it please your excellent Majesty, at the humble suit of the Lords Spiritual and Temporal, and the Commons in this present

Parliament assembled, that it may be declared and enacted, and be it declared and enacted by authority of this present Parliament, that all monopolies, and all commissions, grants, licences, charters, and letters patent heretofore made or granted, or hereafter to be made or granted to any person or persons, bodies politic or corporate whatsoever, of or for the sole buying, selling, making, working, or using of anything within this realm, or the dominion of Wales; or of any other monopolies, or of power, liberty, or faculty to dispense with any others, or to give licence or toleration to do, use, or exercise anything against the tenour or purport of any law or statute; or to give or make any warrant for any such dispensation, licence, or toleration to be had or made, or to agree or compound with any others for any penalty or forfeitures limited by any statute, or of any grant or promise of the benefit, profit, or commodity of any forfeiture, penalty, or sum of money, that is or shall be due by any statute, before judgment thereupon had, and all proclamations, inhibitions, restraints, warrants of assistance, and all other matters and things whatsoever, any way tending to the instituting, erecting, strengthening, furthering, or countenancing of the same, or any of them, are altogether contrary to the laws of this realm, and so are, and shall be utterly void and of none effect, and in no wise to be put in use or execution.

Monopolies, etc., shall be tried by of this realm.

2. And be it further declared and enacted by the authority the common laws aforesaid, that all monopolies, and all such commissions, grants, licences, charters, letters patents, proclamations, inhibitions, restraints, warrants of assistance, and all other matters and things tending, as aforesaid, and the force and validity of them, and every of them, ought to be, and shall be for ever hereafter examined, heard, tryed, and determined by and according to the common laws of this realm, and not otherwise.

All persons dis-abled to use monopolies, etc.

3. And be it further enacted by the authority aforesaid, that all person and persons, bodies politic and corporate whatsoever, which now are, or hereafter shall be, shall stand and be disabled, and uncapable to have, use, exercise or put in use any monopoly, or any such commission, grant, licence, charter, letters patents, proclamation, inhibition, restraint, warrant of assistance, or other matter or thing tending, as aforesaid, or any liberty, power or faculty, grounded, or pretended to be grounded, upon them or any of them.

4. And be it further enacted by the authority aforesaid, The party that if any person or persons at any time after the end of grieved by preforty days next, after the end of this present session of par-poly, etc., shall liament, shall be hindred, grieved, disturbed, or disquieted, damages and double costs. or his or their goods or chattels any way seized, attached, distrained, taken, carried away, or detained, by occasion or pretext of any monopoly, or of any such commission, grant, licence, power, liberty, faculty, letters patents, proclamation, inhibition, restraint, warrant of assistance, or other matter or thing tending as aforesaid, and will sue to be relieved in or for any of the premises, that in every such case the same person and persons shall and may have his and their remedy for the same at the common law, by an action or actions to be grounded upon this statute; the same action and actions to be heard and determined in the Courts of King's Bench, Common Pleas, and Exchequer, or in any of them, against him or them by whom he or they shall be so hindred, grieved, disturbed, or disquieted, or against him or them by whom his or their goods or chattels shall be so seized, attached, distrained, taken, carried away or detained, wherein all and every such person and persons which shall be so hindred, grieved, disturbed, or disquieted, or whose goods or chattels shall be so seized, attached, distrained, taken, carried away, or detained, shall recover three times so much as the damages which he or they sustained, by means or occasion of being so hindred, grieved, disturbed, or disquieted, or by means of having his or their goods or chattels seized, attached, distrained, taken, carried away, or detained, and double costs; and in such suits, or for the staying or delaying thereof, no essoin, protection, wager of law, aid, prayer, privilege, injunction, or order of restraint, shall be in any wise prayed, granted, admitted or allowed, nor any more than one imparlance: And He that delayeth if any person or persons shall, after notice given that the an action action depending is grounded upon this statute, cause or pro-time statute cure any action at the common law, grounded upon this manufacture. statute, to be stayed or delayed before judgment, by colour or means of any order, warrant, power, or authority, save only of the court wherein such action, as aforesaid, shall be brought and depending, or after judgment had upon such action, shall cause or procure the execution of or upon any such judgment to be stayed or delayed by colour or means of any order, warrant, power, or authority, save only by writ of error or

attaint, that then the said person and persons so offending, shall incur and sustain the pains, penalties, and forfeitures St. 16 R. II. c. 5. ordained and provided by the statute of provision and premunire, made in the sixteenth year of the reign of King Richard the Second.

Letters patents to use new manufactures, saved.

- 5. Provided nevertheless, and be it declared and enacted, that any declaration before mentioned shall not extend to any letters patents and grants of privilege for the term of one and twenty years, or under, heretofore made of the sole working or making of any manner of new manufacture within this realm to the first and true inventor or inventors of such manufactures, which others at the time of the making of such letters patents and grants did not use, so they be not contrary to the law, nor mischievous to the state, by raising of the prices of commodities at home, or hurt of trade, or generally inconvenient, but that the same shall be of such force as they were, or should be, if this Act had not been made, and of none other: And if the same were made for more than one and twenty years, that then the same for the term of one and twenty years only, to be accompted from the date of the first letters patents and grants thereof made, shall be of such force as they were or should have been, if the same had been made but for the term of one and twenty years only, and as if this Act had never been had or made, and of none other.
- 6. Provided also, and be it declared and enacted, that any declaration before mentioned shall not extend to any letters parents and grants of privilege for the term of fourteen years or under, hereafter to be made, of the sole working or making of any manner of new manufactures within this realm, to the true and first inventor or inventors of such manufactures, which others at the time of making such letters patents and grants shall not use, so as also they be not contrary to the law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient: the said fourteen years to be accompted from the date of the first letters patents or grant of such privilege hereafter to be made, but that the same shall be of such force as they should be, if this Act had never been made, and of none other.

Grants confirmed by Act of Parliament, saved.

7. Provided also, and it is hereby further intended, declared, and enacted by authority aforesaid, that this Act, or any thing therein contained, shall not in any wise extend, or be prejudicial to any grant or privilege, power or authority whatsoever heretofore made, granted, allowed, or confirmed by any Act of Parliament now in force, so long as the same shall so continue in force.

8. Provided also, that this Act shall not extend to any warrants warrant or privy seal, made or directed, or to be made or granted to jusdirected by his Majesty, his heirs or successors, to the justices of the Courts of the King's Bench, or Common Pleas, and barons of Exchequer, justices of assize, justices of over and terminer, and gaol delivery, justices of the peace, and other justices for the time being, having power to hear and determine offences done against any penal statute, to compound for the forfeitures of any penal statute, depending in suit and question before them, or any of them respectively, after plea pleaded by the party defendant.

- 9. Provided also, and it is hereby further intended, de-Charters granted clared, and enacted, that this Act, or anything therein con-to corporations, tained, shall not in any wise extend or be prejudicial unto the city of London, or to any city, borough, or town-corporate within this realm, for, or concerning any grants, charters, or letters patents to them, or any of them, made or granted, or for, or concerning any custom or customs used by or within them, or any of them, or unto any corporations, companies, or fellowships of any art, trade, occupation, or mystery, or to any companies or societies of merchants within this realm, erected for the maintenance, enlargement, or ordering of any trade or merchandise; but that the same charters, customs, corporations, companies, fellowships, and societies, and their liberties, privileges, powers, and immunities, shall be and continue of such force and effect as they were before the making of this Act, and of none other; anything before in this Act contained to the contrary in any wise notwithstanding.
- 10. Provided also, and be it enacted, that this Act, or any Letters patents declaration, provision, disablement, penalty, forfeiture, or that concern printing, saltother thing before mentioned, shall not extend to any letters petre, gun patents, or grants of privilege heretofore made, or hereafter to ordname be made, of, for, or concerning printing, nor to any commission, grant, or letters patents heretofore made, or hereafter to be made, of, for, or concerning the digging, making or compounding of saltpetre or gunpowder; or the casting or making of ordnance; or shot for ordnance; nor to any grant or letters patents heretofore made, or hereafter to be made, of any office or offices heretofore erected, made, or ordained, and now in

powder, great

being, and put in execution, other than such offices as have been decried by any of his Majesty's proclamation or proclamations; but that all and every the same grants, commissions, and letters patents, and all other matters and things tending to the maintaining, strengthening, or furtherance of the same, or any of them, shall be and remain of the like force and effect, and no other, and as free from the declarations, provisions, penalties, and forfeitures contained in this Act, as if this Act had never been had nor made, and not otherwise.

This Act shall not extend to commissions for alum mines. 11. Provided also, and be it enacted, that this Act, or any declaration, provision, disablement, penalty, forfeiture, or other thing before mentioned, shall not extend to any commission, grant, letters patents, or privilege, heretofore made, or hereafter to be made, of, for, or concerning the digging, compounding, or making of alum or alum mines, but that all and every the same commissions, grants, letters patents, and privileges, shall be and remain of the like force and effect, and no other, and as free from the declarations, provisions, penalties, and forfeitures contained in this Act, as if this Act had never been had nor made, and not otherwise.

5 & 6 WILL. IV. c. 83.

An Act to amend the Law touching Letters Patent for Inventions.

10th Sept., 1835.

WHEREAS it is expedient to make certain additions to and alterations in the present law touching letters patent for inventions, as well for the better protecting of patentees in the rights intended to be secured by such letters patent, as for the more ample benefit of the public from the same: Be it enacted by, etc., that any person who, as grantee, assignee, or otherwise, hath obtained, or who shall hereafter obtain letters patent, for the sole making, exercising, vending, or using of any invention, may, if he think fit, enter 1 with the clerk of

¹ See 15 & 16 Vict. c. 83, s. 39, post.—Eds.

the patents of England, Scotland, or Ireland, respectively, as Disclaimer of any the case may be, having first obtained the leave of his part of specification, or a memo-Majesty's attorney-general or solicitor-general in case of an randum of any alteration therein. English patent, of the lord advocate or solicitor-general of Scotland in case of a Scotch patent, or of his Majesty's attorney-general or solicitor-general for Ireland in case of an Irish patent, certified by his fiat and signature, a disclaimer¹ of any part of either the title of the invention or of the specification, stating the reason for such disclaimer, or may, with such leave as aforesaid, enter a memorandum of any alteration in the said title or specification, not being such disclaimer or such alteration as shall extend the exclusive right granted by the said letters patent; and such disclaimer or memorandum of alteration being filed by the said clerk of the patents, and enrolled with the specification, shall be deemed and taken to be part of such letters patent or such specification in all courts whatever: Provided always, that caveat. any person may enter a caveat, in like manner as caveats are now used to be entered, against such disclaimer or alteration; which caveat being so entered shall give the party entering the same a right to have notice of the application being heard by the attorney-general, or solicitor-general, or lord advocate, Disclaimer not to respectively: Provided also, that no such disclaimer or altera-pending at the tion shall be receivable in evidence in any action or suit (save time. and except in any proceeding by scire facias) pending at the time when such disclaimer or alteration was enrolled, but in every such action or suit the original title and specification alone shall be given in evidence, and deemed and taken to be the title and specification of the invention for which the letters patent have been or shall have been granted: Pro- Attorney-general vided also, that it shall be lawful for the attorney-general, or may require the solicitor-general, or lord advocate, before granting such fiat, to his disclaumer. require the party applying for the same to advertise his disclaimer or alteration in such manner as to such attorneygeneral, or solicitor-general, or lord advocate shall seem right, and shall, if he so require such advertisement, certify in his fiat that the same has been duly made.

2. And be it enacted, that if in any suit or action it shall Mode of proceedbe proved, or specially found by the verdict of a jury, that ing where paten-tee is proved not to be the real in-

self to be so.2

It is sufficient to file a copy of the disclaimer. (Wallington v. Dale, he believed him-Exch. 284)—Fds 6 Exch. 284.)—Fds.

² See 15 & 16 Vict. c. 83, s. 40, post.—Eds.

any person who shall have obtained letters patent for any invention or supposed invention, was not the first inventor thereof, or of some part thereof, by reason of some other person or persons having invented or used the same, or some part thereof, before the date of such letters patent, or if such patentee or his assigns shall discover that some other person had, unknown to such patentee, invented or used the same, or some part thereof, before the date of such letters patent, it shall and may be lawful for such patentee or his assigns to petition his Majesty in council to confirm the said letters patent, or to grant new letters patent, the matter of which petition shall be heard before the judicial committee of the privy council: and such committee, upon examining the said matter, and being satisfied that such patentee believed himself to be the first and original inventor, and being satisfied that such invention or part thereof had not been publicly and generally used before the date of such first letters patents, may report to his Majesty their opinion that the prayer of such petition ought to be complied with, whereupon his Majesty may, if he think fit, grant such prayer; and the said letters patent shall be available in law and equity to give to such petitioner the sole right of using, making, and vending such invention as against all persons whatsoever, any law, usage, or custom to the contrary thereof notwithstanding: Provided, that any person opposing such petition shall be entitled to be heard before the said judicial committee: Provided also, that any person, party to any former suit or action touching such first letters patent, shall be entitled to have notice of such petition before presenting the same.

If a verdict pass the judge may grant a certifishall entitle the patentee, upon a verdict in his favour, to treble costs.1

3. And be it enacted, that if any action at law or any suit for the patentee, in equity for an account shall be brought in respect of any grant a certifi-cate, which being alleged infringement of such letters patent heretofore or heregiven in evidence after granted, or any scire facias to repeal such letters patent, in any other suit, and if a wordist shall restrict the state of and if a verdict shall pass for the patentee or his assigns, or if a final degree or decretal order shall be made for him or them. upon the merits of the suit, it shall be lawful for the judge before whom such action shall be tried to certify on the record, or the judge who shall make such decree or order to give a certificate under his hand, that the validity of the patent came in question before him, which record or certificate being given in evidence in any other suit or action whatever touching such

¹ See 15 & 16 Vict. c. 83, s. 43.—Eds.

patent, if a verdict shall pass, or decree or decretal order be made, in favour of such patentee or his assigns, he or they shall receive treble costs in such suit or action, to be taxed at three times the taxed costs, unless the judge making such second or other decree or order, or trying such second or other action, shall certify that he ought not to have such treble costs.

4. And be it further enacted, that if any person who now Mode of proceedhath or shall hereafter obtain any letters patent as aforesaid, ing in case of apshall advertise in the London Gazette three times, and in three prolongation of the term of a pa-London papers, and three times in some country paper pub-tent. lished in the town where or near to which he carried on any manufacture of anything made according to his specification, or near to or in which he resides, in case he carried on no such manufacture, or published in the county where he carries on such manufacture, or where he lives, in case there shall not be any paper published in such town,2 that he intends to apply to his Majesty in council for a prolongation of his term of sole using and vending his invention, and shall petition his Majesty in council to that effect, it shall be lawful for any person to enter a caveat at the council office; and if his Majesty shall refer the consideration of such petition to the judicial committee of the privy council, and notice shall first be by him given to any person or persons who shall have entered such caveats, the petitioner shall be heard by his counsel and witnesses to prove his case, and the persons entering caveats shall likewise be heard by their counsel and witnesses; whereupon, and upon hearing and inquiring of the whole matter, the judicial committee may report to his Majesty that a further extension of the term in the said letters patent should be granted, not exceeding seven years; and his Majesty is hereby authorized and empowered, if he shall think fit, to grant new letters patent for the said invention for a term not exceeding seven years after the expiration of the first term, any law, custom, or usage to the contrary in anywise notwithstanding; Provided that no such extension shall be granted, if the application by petition shall not be made and prosecuted with effect

^{&#}x27; See 2 & 3 Vict. c. 67, s. 2; 7 & 8 Vict. c. 69, ss. 2, 3, 4; 15 & 16 Vict. c. 83, s. 40; 16 & 17 Vict. c. 115, s. 7.—Eds.

² Where the petitioner resides abroad, and has no manufactory in England, he will sufficiently comply with this part of the section if he insert advertisements in the newspapers published in the towns or county where his licensees are resident. (Derosne's Patent, 4 Moore P. C. C. 416; S. C. W. P. C. 2. 2.) -Eds.

before the expiration of the term originally granted in such letters patent.1

In case of action, etc., notice of objections to be given.

5. And be it enacted, that in any action brought against any person for infringing any letters patent, the defendant on pleading thereto shall give to the plaintiff, and in any scire facias to repeal such letters patent the plaintiff shall file with his declaration, a notice of any objections on which he means to rely at the trial of such action, and no objection shall be allowed to be made in behalf of such defendant or plaintiff respectively at such trial, unless he prove the objections stated in such notice: Provided always, that it shall and may be lawful for any judge at chambers, on summons served by such defendant or plaintiff on such plaintiff or defendant respectively, to show cause why he should not be allowed to offer other objections whereof notice shall not have been given as aforesaid, to give leave to offer such objections, on such terms as to such judge shall seem fit.2

As to costs in actions for infringing letters patent.

And be it enacted, that in any action brought for infringing the right granted by any letters patent, in taxing the costs thereof regard shall be had to the part of such case which has been proved at the trial, which shall be certified by the judge before whom the same shall be had, and the costs of each part of the case shall be given according as either party has succeeded or failed therein, regard being had to the notice of objections, as well as the counts in the declaration, and without regard to the general result of the trial.3

Penalty for using, unautho-rized, the name

7. And be it enacted, that if any person shall write, paint, or print, or mould, cast, or carve, or engrave or stamp, upon of a patentee, etc. anything made, used, or sold by him, for the sole making or selling of which he hath not or shall not have obtained letters patent, the name or any imitation of the name of any other person who hath or shall have obtained letters patent for the sole making and vending of such thing, without leave in writing of such patentee or his assigns, or if any person shall upon such thing, not having been purchased from the patentee or some person who purchased it from or under such patentee, or not having had the licence or consent in writing of such

¹ Sec 2 & 3 Vict. c. 67, s. 2, post.—Eds.

² This section is impliedly repealed by 15 & 16 Vict. c. 83, s. 34, post.—Eds.

³ This section is impliedly repealed by 15 & 16 Vict. c. 83, s. 43, post.—Eds.

patentee or his assigns, write, paint, print, mould, cast, carve, engrave, stamp, or otherwise mark the word "patent," the words "letters patent," or the words "by the king's patent," or any words of the like kind, meaning, or import, with a view of imitating or counterfeiting the stamp, mark, or other device of the patentee, or shall in any other manner imitate or counterfeit the stamp or mark or other device of the patentee, he shall for every such offence be liable to a penalty of fifty pounds, to be recovered by action of debt, bill, plaint, process, or information in any of his Majesty's courts of record at Westminster or in Ireland, or in the court of session in Scotland, one-half to his Majesty, his heirs and successors, and the other to any person who shall sue for the same: Provided always, that nothing herein contained shall be construed to extend to subject any person to any penalty in respect of stamping or in any way marking the word "patent" upon any thing made, for the sole making or vending of which a patent before obtained shall have expired.

2 & 3 Vіст. с. 67.

An Act to amend an Act of the fifth and sixth years of the reign of King William the Fourth, intituled An Act to amend the Law touching Letters Patent for Inventions.

24th August, 1839.

Whereas by an Act passed in the fifth and sixth years of 5 & 6 Wm. IV. the reign of his Majesty King William the Fourth, intituled 5.83.

An Act to amend the Law touching Letters Patent for Inventions, it is amongst other things enacted, that if any person having obtained any letters patent as therein mentioned, shall give notice as thereby required of his intention to apply to his Majesty in council for a prolongation of his term of sole using and vending his invention, and shall petition his Majesty in council to that effect, it shall be lawful for any person to enter a caveat at the Council Office; and if his Majesty shall refer the consideration of such petition to the judicial committee of the Privy Council, and notice shall be first given to any person or persons who shall have entered such caveats,

the petitioner shall be heard by his counsel and witnesses to prove his case, and the persons entering caveats shall likewise he heard by their counsel and witnesses, whereupon, and upon hearing and inquiry of the whole matter, the judicial committee may report to his Majesty that a further extension of the term in the said letters patent shall be granted, not exceeding seven years, and his Majesty is thereby authorized and empowered, if he shall think fit, to grant new letters patent for the said invention for a term not exceeding seven years after the expiration of the first term, any law, custom, or usage to the contrary notwithstanding; provided that no such extension shall be granted if the application by petition shall not be made and prosecuted with effect before the expiration of the term originally granted in such letters patent: And whereas it has happened since the passing of the said Act, and may again happen, that parties desirous of obtaining an extension of the term granted in letters patent of which they are possessed, and who may have presented a petition for such purposes in manner by the said recited Act directed, before the expiration of the said term, may nevertheless be prevented by causes over which they have no control from prosecuting with effect their application before the judicial committee of the Privy Council; and it is expedient therefore that the said judicial committee should have power, when under the circumstances of the case they shall see fit to entertain such application, and to report thereon, according to the provisions of the said recited Act, notwithstanding that before the hearing of the case before them the terms of the letters patent sought to be renewed or extended may have expired: Be it therefore enacted by, etc., that so much of the said recited Act as provides that no extension of the term of letters patent shall be granted as therein mentioned if the application by petition for such extension be not prosecuted with effect before the expiration of the term originally granted in such letters patent, shall be and the same is hereby repealed.

Repealing provision as to prerenting petition for extension be fore the expiration of the patent.

Term may be extended though the application for extension be not prosecuted the expiration thereof.

2. And be it further enacted, that it shall be lawful for the judicial committee of the Privy Council, in all cases where it shall appear to them that any application for an with effect before extension of the term granted by any letters patent, the petition for which extension shall have been referred to them for their consideration, has not been prosecuted with effect before the expiration of the said term from any other causes

than the neglect or default of the petitioner, to entertain such application, and to report thereon as by the said recited Act provided, notwithstanding the term originally granted in such letters patent may have expired before the hearing of such application; and it shall be lawful for her Majesty, if she shall think fit, on the report of the said judicial committee recommending an extension of the term of such letters patent, to grant such extension, or to grant new letters patent for the invention or inventions specified in such original letters patent, for a term not exceeding seven years after the expiration of the term mentioned in the said original letters patent: Provided always, that no such extension or new letters patent shall be granted if a petition for the same shall not have been presented as by the said recited Act directed before the expiration of the term sought to be extended, nor in case of petitions presented after the thirtieth day of November, 1839, unless such petition shall be presented six calendar months at the least before the expiration of such term, nor in any case unless sufficient reason shall be shown to the satisfaction of the said judicial committee for the omission to prosecute with effect the said application by petition before the expiration of the said term.

7 & 8 VICT. c. 69.

An Act for amending an Act passed in the fourth year of the reign of his late Majesty, intituled An Act for the better Administration of Justice in his Majesty's Privy Council; and to extend its Jurisdiction and Powers.

6th August, 1844.

Whereas the Act passed in the fourth year of the reign of \$2.4 Wm. IV. his late Majesty, intituled An Act for the better Administra-c. 41. tion of Justice in His Majesty's Privy Council, hath been found beneficial to the due administration of justice: And whereas \$2.6 Wm. IV. another Act, passed in the sixth year of the said reign, inti-c. 83. tuled An Act to amend the Law touching Letters Patent for Inventions, hath been also found advantageous to inventors and to the public: And whereas the judicial committee,

acting under the authority of the said Acts, hath been found to answer well the purposes for which it was so established by Parliament, but it is found necessary to improve its proceedings in some respects, for the better despatch of business, and expedient also to extend its jurisdiction and powers. [The remainder of the preamble and subsequent clause, do not relate to patents.]

On petition, her Majesty may grant an extensiou of patent term in certain cases.

2. And whereas it is expedient, for the further encouragement of inventions in the useful arts, to enable the time of monopoly in patents to be extended in cases in which it can be satisfactorily shown that the expense of the invention hath been greater than the time now limited by law will suffice to reimburse; but be it enacted, that if any person, having obtained a patent for any invention, shall, before the expiration thereof, present a petition to her Majesty in council, setting forth that he has been unable to obtain a due remuneration for his expense and labour in perfecting such invention, and that an exclusive right of using and vending the same for the further period of seven years, in addition to the term in such patent mentioned, will not suffice for his reimbursement and remuneration, then, if the matter of such petition shall be by her Majesty referred to the judicial committee of the Privy Council, the said committee shall proceed to consider the same after the manner and in the usual course of its proceedings touching patents; and if the said committee shall be of opinion, and shall so report to her Majesty, that a further period greater than seven years' extension of the said patent term ought to be granted to the petitioner, it shall be lawful for her Majesty, if she shall so think fit, to grant an extension thereof for any time not exceeding fourteen years, in like manner and subject to the same rules as the extension for a term not exceeding seven years is now granted under the powers of the said Act of the sixth year of the reign of his late Majesty.

Extension may be for a lesser term than that prayed. 3. Provided always, and be it enacted, that nothing herein contained shall prevent the said judicial committee from reporting that an extension for any period not exceeding seven years should be granted, or prevent her Majesty from granting an extension for such lesser term than the petition shall have prayed.

As to extension of term where patentees have 4. And whereas doubts have arisen touching the power given by the said recited Act of the sixth year of the reign

of his late Majesty in cases where the patentees have wholly seeigned their or in part assigned their right; be it enacted, that it shall be patent rights. lawful for her Majesty, on the report of the judicial committee, to grant such extension as is authorized by the said Act and by this Act, either to an assignee or assignees, or to the original patentee or patentees, or to an assignee or assignees and original patentee or patentees conjointly.1

5. And be it enacted that in case the original patentee or Disclaimer and patentees hath or have departed with his or their whole or alteration notany part of his or their interest by assignment to any other withstanding original patentee person or persons, it shall be lawful for such patentee, to-may have as gether with such assignee or assignees, if part only hath been right. assigned, and for the assignee or assignees, if the whole hath been assigned, to enter a disclaimer and memorandum of alteration under the powers of the said recited Act; and such disclaimer and memorandum of such alteration, having been so entered and filed as in the said recited Act mentioned, shall be valid and effectual in favour of any person or persons in whom the rights under the said letters patent may then be or thereafter become legally vested; and no objection shall be made in any proceeding whatsoever on the ground that the party making such disclaimer or memorandum of such alteration had not sufficient authority in that behalf.

6. And be it enacted, that any disclaimer or memorandum Disclaimer and of alteration before the passing of this Act, or by virtue of memorandum of the said recited Act, by such patentee with such assignee or already made to be deemed valid. by such assignee as aforesaid, shall be valid and effectual to bind any person or persons in whom the said letters patent might then be or have since become vested; and no objection shall be made in any proceeding whatsoever that the party making such disclaimer or memorandum of alteration had not authority in that behalf.

7. And be it enacted, that any new letters patent which New letters before the passing of this Act may have been granted, under patent granted under 5 & 6 Wm. the provisions of the above-recited Act of the sixth year of IV. to assignees before passing of the reign of his late Majesty, to an assignee or assignees, this Act declared shall be as valid and effectual as if the said letters patent valid. had been made after the passing of this Act, and the title of any party to such new letters patent shall not be invalidated

As to this section see Napier's Patent (13 Moo. P. C. C. 543); Hutchison's Patent (14 Moo. P. C. C. 364); and the cases cited ante, Chap. XII.

Proviso.

by reason of the same having been granted to an assignee or assignees: provided always, that nothing herein contained shall give any validity or effect to any letters patent heretofore granted to any assignee or assignees where any action or proceeding in scire facias or suit in equity shall have been commenced at any time before the passing of this Act, wherein the validity of such letters patent shall have been or may be questioned.

Judicial committee may appoint clerk of Privy Council to take proofs in matters

8. Provided always, and be it enacted, that in the case of any matter or thing being referred to the judicial committee, it shall be lawful for the said committee to appoint one or referred to them. other of the clerks of the Privy Council to take any formal proofs required to be taken in dealing with the matter or thing so referred, and shall, if they so think fit, proceed upon such clerk's report to them as if such formal proofs had been taken by and before the said judicial committee.

15 & 16 Vіст. с. 83.

An Act for amending the Law for granting Patents for Inventions.

1st July, 1852.

WHEREAS it is expedient to amend the law concerning letters patent for inventions: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:-

Certain persons constituted Commissioners of patents for inventions, three of whom may act, the Chancellor or Master of the Rolls being one.

1. The Lord Chancellor, and Master of the Rolls, her Majesty's Attorney-General for England, her Majesty's Solicitor-General for England, the Lord Advocate, her Majesty's Solicitor-General for Scotland, her Majesty's Attorney-General for Ireland, and her Majesty's Solicitor-General for Ireland, for the time being respectively, together with such other person or persons as may be from time to time appointed by her Majesty, as hereinafter mentioned, shall be Commissioners of Patents for Inventions; and it shall be lawful for her Majesty from time to time, by warrant under her royal sign-manual, to appoint such other person or persons as she may think fit to be a Commissioner or Commissioners as aforesaid; and every person so appointed shall continue such Commissioner during her Majesty's pleasure; and all the powers hereby vested in the Commissioners may be exercised by any three or more of them, the Lord Chancellor or Master of the Rolls being one.

2. It shall be lawful for the Commissioners to cause a seal seal of the Comto be made for the purposes of this Act, and from time to missioners. time to vary such seal, and to cause to be sealed therewith all the warrants for letters patent under this Act, and all instruments and copies proceeding from the office of the Commissioners, and all courts, judges, and other persons whomsoever shall take notice of such seal, and receive impressions thereof in evidence, in like manner as impressions of the great seal are received in evidence, and shall also take notice of and receive in evidence, without further proof or production of the originals, all copies or extracts, certified under the seal of the said office, of or from documents deposited in such office.

3. It shall be lawful for the Commissioners from time to Power to Commissioners to time to make such rules and regulations (not inconsistent make rules and with the provisions of this Act) respecting the business of regulations, their office, and all matters and things which under the pro-laid before Parliament. visions herein contained are to be under their control and direction, as may appear to them necessary and expedient for the purposes of this Act; and all such rules shall be laid before both Houses of Parliament within fourteen days after the making thereof, if Parliament be sitting, and if Parliament be not sitting, then within fourteen days after the next meeting of Parliament; and the Commissioners shall cause a Commissioners to report to be laid annually before Parliament of all the pro- report annually report to Parliament. ceedings under and in pursuance of this Act.

4. It shall be lawful for the Commissioners of her Ma- Treasury to projesty's Treasury to provide and appoint from time to time vide offices. proper places or buildings for an office or offices for the purposes of this Act.

5. It shall be lawful for the Commissioners, with the con- Commissioners, sent of the Commissioners of the Treasury, from time to time with consent of the Treasury, to to appoint, for the purposes of this Act, such clerks and appoint clerks, officers as the Commissioners may think proper; and it shall be lawful for the Commissioners from time to time to remove any of the clerks and officers so appointed.

6. Every petition for the grant of letters patent for an Petition and de-

claration to be accompanied with a provisional specification. invention, and the declaration required to accompany such petition, shall be left at the office of the Commissioners, and there shall be left therewith a statement in writing, hereinafter called the provisional specification, isigned by or on behalf of the applicant for letters patent, describing the nature of the said invention; and the day of the delivery of every such petition, declaration, and provisional specification shall be recorded at the said office, and endorsed on such petition, declaration, and provisional specification, and a certificate thereof given to such applicant or his agent; and all such petitions, declarations, and provisional specifications shall be preserved in such manner as the Commissioners may direct, and a registry thereof and of all proceedings thereon kept at the office of the Commissioners.

Every application to be referred to one of the law officers. 7. Every application for letters patent made under this Act shall be referred by the Commissioners, according to such regulations as they may think fit to make, to one of the law officers.

The provisional specification to be referred to the law officer, who, if satisfied, may give a certificate of his allowance, which shall be filed.

8. The provisional specification shall be referred to the law officer, who shall be at liberty to call to his aid such scientific or other person as he may think fit, and to cause to be paid to such person by the applicant such remuneration as the law officer shall appoint; and if such law officer be satisfied that the provisional specification describes the nature of the invention, he shall allow the same and give a certificate of his allowance, and such certificate shall be filed in the office of the Commissioners, and thereupon the invention therein referred to may, during the term of six months from the date of the application for letters patent for the said invention, be used and published without prejudice to any letters patent to be granted for the same, and such protection from the consequences of use and publication is hereinafter referred to as provisional protection: Provided always, that in case the title of the invention or the provisional specification be too large or insufficient, it shall be lawful for the law officer to whom the same is referred to allow or require the same to be amended.

Inventor may deposit, in lieu of a provisional specification, a complete specification, such deposit to confer for a limited time

9. The applicant for letters patent for an invention, instead of leaving with the petition and declaration a provisional specification as aforesaid, may, if he think fit, file with the

cation, such deposit to confer 1 See Rule X, of the second set of rules of the Patent Commisforal limited time signers,—Eds.

said petition and declaration an instrument in writing under the like rights as his hand and seal (hereinafter called a complete specification), letters patent. particularly describing and ascertaining the nature of the said invention, and in what manner the same is to be performed, which complete specification shall be mentioned in such declaration; and the day of the delivery of every such petition, declaration, and complete specification shall be recorded at the office of the Commissioners, and endorsed on such petition, declaration, and specification, and a certificate thereof given to such applicant or his agent; and thereupon, subject and without prejudice to the provisions hereinafter contained, the invention shall be protected under this Act,1 for the term of six months from the date of the application, and the applicant shall have during such term of six months the like powers, rights, and privileges as might have been conferred upon him by letters patent for such invention, issued under this Act, and duly sealed as of the day of the date of such application; and during the continuance of such powers, rights, and privileges under this provision, such invention may be used and published without prejudice to any letters patent to be granted for the same; and where letters patent are granted in respect of such invention, then in lieu of a condition for making void such letters patent in case such invention be not described and ascertained by a subsequent specification, such letters patent shall be conditioned to become void if such complete specification, filed as aforesaid, does not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed: and a copy of every such complete specification shall be open to the inspection of the public, as hereinafter provided, from the time of depositing the same, subject to such regulation as the Commissioners may make.

10. In case of any application for letters patent for any Letters patent invention, and the obtaining upon such application of pro- granted to the visional protection for such invention, or of protection for the too invalidated by protection obsame by reason of the deposit of a complete specification as tained in fraud aforesaid, in fraud of the true and first inventor, any letters ventor. patent granted to the true and first inventor of such invention shall not be invalidated by reason of such application or of such provisional or other protection as aforesaid, or of any use or publication of the invention subsequent to such application,

¹ See sect. 24.

and before the expiration of the term of such provisional or other protection.

Commissioners to cause protec-tions to be advertised.

Application for letters patent to be advertised, and also oppositions to the same.

- 11. Where any invention is provisionally protected under this Act, or protected by reason of the deposit of such complete specification as aforesaid, the Commissioners shall cause such provisional protection or such other protection as aforesaid to be advertised in such manner as they may see fit.
- 12. The applicant for letters patent, so soon as he may think fit, after the invention shall have been provisionally protected under this Act, or where a complete specification has been deposited with his petition and declaration, then so soon as he may think fit after such deposit, may give notice at the office of the Commissioners of his intention of proceeding with his application for letters patent for the said invention, and thereupon the said Commissioners shall cause his said application to be advertised in such manner as they may see fit; and any persons having an interest in opposing the grant of letters patent for the said invention shall be at liberty to leave particulars in writing of their objections to the said application at such place and within such time and subject to such regulations as the Commissioners may direct.

Specifications officer.

13. So soon as the time for the delivery of such objections and objectious to shall have expired the provisional specification or complete specification (as the case may be) and particulars of objection (if any) shall be referred to the law officer to whom the application has been referred.1

Power to law officer to order by or to whom costs shall be paid.

14. It shall be lawful for the law officer to whom any application for such letters patent is referred, if he see fit, by certificate under his hand, to order by or to whom the costs of any hearing or inquiry upon any objection, or otherwise in relation to the grant of such letters patent, or in relation to the provisional (or other) protection acquired by the applicant under this Act, shall be paid, and in what manner and by whom such costs are to be ascertained; and if any costs so ordered to be paid be not paid within four days after the amount thereof shall be so ascertained, it shall be lawful for such law officer to make an order for the payment of the

¹ It is the law officer's duty on the hearing of several applications by rival inventors to determine the matter upon the evidence, and not to remit the question to the Lord Chancellor by issuing his warrant for sealing both patents. (Re Henry's Application and Re Farquharson's Application, L. R. 8 Ch. 167.)-Eds.

same; and every such order may be made a rule of one of her Majesty's superior courts at Westminster or Dublin, and may be recorded in the books of council and session in Scotland, to the effect that execution may pass thereupon in common form.

15. It shall be lawful for such law officer, after such hear- Power to law ing, if any, as he may think fit, to cause a warrant to be made warrant to be for the sealing of letters patent for the said invention, and made for sealing of letters patent. such warrant shall be sealed with the seal of the Commissioners, and shall set forth the tenor and effect of the letters patent thereby authorized to be granted, and such law officer shall direct the insertion in such letters patent of all such restrictions, conditions, and provisoes as he may deem usual and expedient in such grants, or necessary in pursuance of the provisions of this Act; and the said warrant shall be the warrant for the making and sealing of letters patent under this Act according to the tenor of the said warrant: Provided Chancellor to always, that the Lord Chancellor shall and may have and have same powers in respect exercise such powers, authority, and discretion in respect to as he now has. the said warrant, and the letters patent therein directed to be made under this Act, as he now has and might now exercise with respect to the warrant for the issue under the great seal of letters patent for any invention, and with respect to the making and issuing of such letters patent; and the writ of scire facias shall lie for the repeal of any letters patent issued writ of scire under this Act, in the like cases as the same would lie for the facias. repeal of letters patent which may now be issued under the great seal.

16. Provided also, that nothing herein contained shall Nothing to affect extend to abridge or affect the prerogative of the crown in the prerogative of the crown in relation to the granting or withholding the grant of any granting or with letters patent; and it shall be lawful for her Majesty, by letters patent. warrant under her royal sign-manual to direct such law officer to withhold such warrant as aforesaid, or that any letters patent for the issuing whereof he may have issued a warrant as aforesaid shall not issue, or to direct the insertion in any letters patent to be issued in manner herein provided of any

¹ It had been held that no caveat against the sealing of letters patent is to be lodged without the express leave of the Lord Chancellor. (Re Heathorn's Patent, 10 Jur. N. S. 810.) But this rule was not followed in Re Vincent's Patent, L. R. 2 Ch. 341. Affidavits in opposition to a patent must be filed before the morning of hearing. (Re McKean's Patent, 1 De G. F. & J. 2.)

restrictions, conditions, or provisoes which her Majesty may think fit, in addition to or in substitution for any restrictions, conditions, or provisoes which would otherwise be inserted therein under this Act; and it shall also be lawful for her Majesty, by like warrant, to direct any complete specification which may have been filed under the provisions hereinbefore contained, and in respect of the invention described, in which no letters patent may have been granted, to be cancelled, and thereupon the protection obtained by the filing of such complete specification shall cease.

Letters patent to be made subject to avoidance on non-fulfilment of certain conditions.

17. All letters patent for inventions granted under the provisions hereinbefore contained shall be made subject to the condition that the same shall be void, and that the powers and privileges thereby granted shall cease and determine, at the expiration of three years and seven years respectively from the date thereof, unless there be paid, before the expiration of the said three and seven years respectively, the sum or sums of money and stamp duties in the schedule to this Act annexed; and the payment of the said sums of money and stamp duties respectively shall be endorsed on the warrant for the said letters patent; and such officer of the Commissioners as may be appointed for this purpose shall issue under the seal of the Commissioners a certificate of such payment, and shall endorse a receipt for the same on any letters patent issued under the authority of the said warrant; and such certificate, duly stamped, shall be evidence of the payment of the several sums respectively. [Repealed by Act 16 Vict. cap. 5.]

Letters patent issued under the great seal to be valid for the whole of the United Kingdom, the Channel Islands, and the Isle of Man.

18. The Commissioners, so soon after the sealing of the said warrant as required by the applicant for the letters patent, shall cause to be prepared letters patent for the invention, according to the tenor of the said warrant, and it shall be lawful for the Lord Chancellor to cause such letters patent to be sealed with the great seal of the United Kingdom, and such letters patent so sealed shall extend to the whole of the United Kingdom of Great Britain and Ireland, the Channel Islands, and the Isle of Man; and in case such warrant so direct, such letters patent shall be made applicable to her Majesty's colonies and plantations abroad, or such of them as may be mentioned in such warrant; and such letters patent shall be valid and effectual as to the whole of such United Kingdom, and the said islands and isle, and the said colonies

or plantations, or such of them as aforesaid, and shall confer the like powers, rights, and privileges as might, in case this Act had not been passed, have been conferred by several letters patent of the like purport and effect passed under the great seal of the United Kingdom, under the seal appointed to be used instead of the great seal of Scotland, and under the great seal of Ireland respectively, and made applicable to England, the dominion of Wales, the town of Berwick-upon-Tweed, the Channel Islands, and Isle of Man, and the said colonies and plantations, or such of them as aforesaid, to Scotland, and to Ireland respectively, save as herein otherwise provided: Provided always, that nothing in this Act contained Nothing to give shall be deemed or taken to give any effect or operation to effect to any letany letters patent to be granted under the authority of this granted in any Act in any colony in which such or the like letters patent would be invalid by the law in force in the same colony for the time being: Provided always, that a transcript of such letters shall, so soon after the sealing of the same and in such manner as the Commissioners shall direct, be transmitted to the Director of Chancery in Scotland, and be recorded in the records of Chancery in Scotland, upon payment of such fees as the Commissioners shall appoint, in the same manner and to the same effect in all respects as letters patent passing under the seal appointed by the treaty of union to be used in place of the great seal of Scotland have heretofore been recorded, and extracts from the said records shall be furnished to all parties requiring the same, on payment of such fees as the Commissioners shall direct, and shall be received in evidence in all courts in Scotland to the like effect as the letters patent themselves.

19. Provided always, that no letters patent, save as herein-Noletters patent after mentioned in the case of letters patent destroyed or lost, three months shall issue on any warrant granted as aforesaid, unless applica- from date of tion be made to seal such letters patent within three months after the date of the said warrant.

20. Provided also, that no letters patent (save letters patent No letters patent issued in lieu of others destroyed or lost) shall be issued or be (except in lieu of those lost, etc.) of any force or effect unless the same be granted during the continuance of the provisional protection under this Act, or tection given by where a complete specification has been deposited under this this Act Act, then unless such letters patent be granted during the continuance of the protection conferred under this Act by

reason of such deposit, save that where the application to seal such letters patent has been made during the continuance of such provisional or other protection as aforesaid, and the sealing of such letters patent has been delayed by reason of a caveat or an application to the Lord Chancellor against or in relation to the sealing of such letters patent, then such letters patent may be sealed at such time as the Lord Chancellor shall direct.1

Letters patent may be granted to personal representatives of the applicant dur-ing the term of protection, or within three months after applicant's decease.

21. Provided also, that where the applicant for such letters patent dies during the continuance of the provisional protection, or the protection by reason of the deposit of a complete specification (as the case may be), such letters patent may be granted to the executors or administrators of such applicant during the continuance of such provisional or other protection, or at any time within three months after the death of such applicant, notwithstanding the expiration of the term of such provisional or other protection, and the letters patent so granted shall be of the like force and effect as if they had been granted to such applicant during the continuance of such provisional or other protection.

If letters patent patent may be issued.

22. Provided also, that in case any such letters patent shall he destroyed or lost, other letters patent of the like tenor and lost, other letters patent of the like tenor and effect, and sealed and dated as of the same day, may, subject to such regulations as the Commissioners may direct, be issued under the authority of the warrant in pursuance of which the original letters patent were issued.

Letters patent may be dated as of the day of the application.

23. It shall be lawful (the Act of the eighteenth year of King Henry the Sixth, chapter one, or any other Act, to the contrary notwithstanding) to cause any letters patent to be issued in pursuance of this Act to be sealed and bear date as of the day of the application for the same, and in case of such letters patent for any invention provisionally registered under the "Protection of Inventions Act, 1851," as of the day of such provisional registration, or where the law officer to whom the application was referred, or the Lord Chancellor, thinks fit and directs, any such letters patent as aforesaid may be sealed and bear date as of the day of the sealing of such letters patent, or of any other day between the day of such application or provisional registration, and the day of such sealing.

¹ Under special circumstances the Lord Chancellor will order a patent to be sealed though the case does not fall within the strict letter of this section. (Re Mackintosh's Patent, 2 Jur. N. S. 1242.)

24. Any letters patent issued under this Act, sealed and Letters patent bearing date as of any day prior to the day of the actual seal- where antedated ing thereof, shall be of the same force and validity as if they validity us if sealed on the day had been sealed on the day as of which the same are expressed of the date. to be sealed, and bear date: Provided always, that (save where such letters patent are granted for any invention, in respect whereof a complete specification has been deposited upon the application for the same under this Act) no proceeding at law or in equity shall be had upon such letters patent in respect of any infringement committed before the same were actually granted.

25. Where, upon any application made after the passing of Letters patent this Act, letters patent are granted in the United Kingdom United Kingdom for or in respect of any invention first invented in any foreign for patented foreign invencountry, or by the subject of any foreign power or state, and tions not to continue in force a patent or like privilege for the monopoly or exclusive use or after the expiraexercise of such invention in any foreign country is there ob- foreign patent. tained before the grant of such letters patent in the United Kingdom, all rights and privileges under such letters patent shall (notwithstanding any term in such letters patent limited) cease and be void, immediately upon the expiration or other determination of the term during which the patent or like privilege obtained in such foreign country shall continue in force; 2 or where more than one such patent or like privilege is obtained abroad, immediately upon the expiration or determination of the term which shall first expire or be determined of such several patents or like privileges: Provided always, that no letters patent for or in respect of any invention for which any such patent or like privilege as aforesaid, shall have been obtained in any foreign country, and which shall be granted in the said United Kingdom, after the expiration of the term for which such patent or privilege was granted, or was in force, shall be of any validity.

26. No letters patent for any invention (granted after the Letters patent passing of this Act) shall extend to prevent the use of such not to prevent the use of such the use of inveninvention in any foreign ship or vessel, or for the navigation tions in foreign of any foreign ship or vessel, which may be in any port of her to British ports; Majesty's dominions, or in any of the waters within the juris-

See the cases of Daw v. Elvy (L. R. 3 Eq. 496) and Holste v. Robinson (L. R. 4 Ch. D. 9) cited at pp. 174, 175 of this work.—Eds.

¹ See Saxby v. Hennett, (L. R. 8 Exch. 210 and the other cases cited at pp. 167 and 173 of this work).

except ships of foreign states in whose ports using foreign inventions.

diction of any of her Majesty's courts, where such invention is not so used for the manufacture of any goods or commodities. to be vended within or exported from her Majesty's dominions:1 Provided always, that this enactment shall not extend to the ships or vessels of any foreign state, of which the laws autho-British ships are rize subjects of such foreign state, having patents or like privileges for the exclusive use or exercise of inventions within its territories, to prevent or interfere with the use of such inventions in British ships or vessels, or in or about the navigation of British ships or vessels, while in the ports of such foreign state, or in the waters within the jurisdiction of its courts, where such inventions are not so used for the manufacture of goods or commodities, to be vended within or exported from the territories of such foreign state.

Specifications to be filed instead of being enrolled.

27. All letters patent to be granted under this Act (save only letters patent granted after the filing of a complete specification) shall require the specification thereunder to be filed in the High Court of Chancery, instead of requiring the same to be enrolled, and no enrolment shall be requisite.2

Specifications, etc., to be filed in such office as l ord Chancellor shall direct.

28. Every specification to be filed in pursuance of the condition of any letters patent, shall be filed in such office of the Court of Chancery as the Lord Chancellor shall from time to time appoint,2 and every provisional specification and complete specification left or filed at the office of the Commissioners on the application for any letters patent, shall forthwith after the grant of the letters patent, or if no letters patent be granted then immediately on the expiration of six months from the time of such application, be transferred to and kept in the said office appointed for filing specifications in Chancery: As to filing extra and in case reference is made to drawings in any specification copies of draw-denosited of Global Association copies of draw-denosited of Global As deposited or filed under this Act, an extra copy of such drawings shall be left with such specification. [The latter part of this section was repealed by Act 16 and 17 Vict. cap. 115, sect. 1.]

ings.

- Copies of specifications to be open to inspec tion at office of commissioners, and Dublin.
- 29. The Commissioners shall cause true copies of all specifications (other than provisional specifications), disclaimers,
- ¹ This clause was introduced in consequence of the decision of the and at Edinburgh Court of Chancery in Caldwell v. Van Vliessengen (9 Hare. 415).—Eds.
 - ² Specifications are to be filed at the great seal patent office (see Lord St. Leonard's Orders, Oct. 1st, 1852), and this branch of the Court of Chancery is combined with the office of the commissioners of patents: see No. 6 of the First Set of Rules.—Eds.
 - ³ Provisional specifications are now open to the inspection of the public, after the period of provisional protection has expired, by virtue of the 2nd section of 16 & 17 Vict. c. 115.—Eds.

and memoranda of alterations filed under or in pursuance of this Act, and of all provisional specifications after the term of the provisional protection of the invention has expired, to be open to the inspection of the public at the office of the Commissioners, and at an office in Edinburgh and Dublin respectively, at all reasonable times, subject to such regulations as the Commissioners may direct; and the Commissioners shall cause a transcript of the said letters patent to be transmitted for enrolment in the Court of Chancery, Dublin, and shall cause the same to be enrolled therein, and the transcript or exemplification thenceforward shall have the like effect to all intents and purposes as if the original letters patent had been enrolled in the Court of Chancery in Dublin, and all parties shall have all their remedies by scire facias, or otherwise, as if the letters patent had been granted to extend to Ireland only.

30. The Commissioners shall cause to be printed, pub- Specifications lished, and sold, at such prices and in such manner as they and other documay think fit, all specifications, disclaimers, and memoranda printed and published. of alterations, deposited or filed under this Act, and such specifications (not being provisional specifications), disclaimers, and memoranda respectively, shall be so printed and published as soon as conveniently may be after the filing thereof respectively, and all such provisional specifications shall be so printed and published as soon as conveniently may be after the expiration of the provisional protection obtained in respect thereof; and it shall be lawful for the Commissioners to pre- As to presenting sent copies of all such publications to such public libraries copies of publications to public and museums as they may think fit, and to allow the person libraries, etc. depositing or filing any such specification, disclaimer, or memorandum of alteration, to have such number, not exceeding twenty-five, of the copies thereof so printed and published, without any payment for the same, as they may think

31. It shall be lawful for the Lord Chancellor and the Enrolments, etc., Master of the Rolls to direct the enrolment of specifications, may be removed to the office for disclaimers, and memoranda of alterations, heretofore or here-specifications. after enrolled or deposited at the Rolls Chapel office, or at the petty bag office, or at the enrolment office of the Court of

¹ The 22 Vict. c. 13 (post, p. 332), enables the Secretary of State for War to prohibit the publication of specifications of inventions relating to munitions of war purchased by him under that Act.

The Commissioners have always declined to exercise this power.

Chancery, or in the custody of the Master of the Rolls, as keeper of the public records, to be transferred to and kept in the office appointed for filing specifications in Chancery under this Act.

Commissioners specifications, etc.; such specifications, etc., may be printed and published.

32. The Commissioners shall cause indexes to all specificato cause indexes to be made to old tions, disclaimers, and memoranda of alterations heretofore or to be hereafter enrolled or deposited as last aforesaid to be prepared in such form as they may think fit, and such indexes shall be open to the inspection of the public at such place or places as the Commissioners shall appoint, and subject to the regulations to be made by the Commissioners, and the Commissioners may cause all or any of such indexes, specifications, disclaimers, and memoranda of alterations to be printed, published, and sold in such manner and at such prices as the Commissioners may think fit.

Copies of specifications, etc., as printed by Queen's printers to be evidence.

33. Copies, printed by the printers to the Queen's Majesty, of specifications, disclaimers, and memoranda of alterations, shall be admissible in evidence, and deemed and taken to be prima facie evidence of the existence and contents of the documents to which they purport to relate in all courts and in all proceedings relating to letters patent.—[Repealed by Act 16 & 17 Vict. cap. 115, sect. 1: see sect. 4 of that Act.

Register of pa tents to be kept.

34. There shall be kept at the office appointed for filing specifications in Chancery under this Act a book or books, to be called "The Register of Patents," wherein shall be entered and recorded in chronological order all letters patent granted under this Act, the deposit or filing of specifications, disclaimers, and memoranda of alterations filed in respect of such letters patent, all amendments in such letters patent and specifications, all confirmations and extensions of such letters patent, the expiry, vacating, or cancelling such letters patent, with the dates thereof respectively, and all other matters and things affecting the validity of such letters patent as the Commissioners may direct, and such register, or a copy thereof, shall be open at all convenient times to the inspection of the public, subject to such regulations as the Commissioners may make.

A register of for filing specifications,

35. There shall be kept at the office appointed for filing proprietors to be specifications in Chancery under this Act a book or books, entitled "The Register of Proprietors," wherein shall be entered, in such manner as the Commissioners shall direct, the assignment of any letters patent, or of any share or interest

therein, any licence under letters patent, and the district to which such licence relates, with the name or names of any person having any share or interest in such letters patent or licence, the date of his or their acquiring such letters patent, share, and interest, and any other matter or thing relating to or affecting the proprietorship in such letters patent or licence; and a copy of any entry in such books, certified under such seal as may have been appointed or as may be directed by the Lord Chancellor to be used in the said office, shall be given to any person requiring the same, on payment of the fees hereinafter provided; and such copies so certified shall be received in evidence in all courts and in all proceedings, and shall be prima facie proof of the assignment of such letters patent, or share or interest therein, or of the licence or proprietorship, as therein expressed: Provided always,1 that until such entry shall have been made the grantee or grantees of the letters patent shall be deemed and taken to be the sole and exclusive proprietor or proprietors of such letters patent, and of all the licences and privileges thereby given and granted; that certified duplicates of all entries made in the said register of proprietors shall forthwith be transmitted to the office of the Commissioners in Edinburgh and Dublin, where the same shall also be open to the inspection of the public; and any writ of scire facias to repeal such letters patent may be issued to the sheriff of the county or counties in which the grantee or grantees resided at the time when the said letters patent were granted; and in case such grantee or grantees do not reside in the United Kingdom, it shall be sufficient to file such writ in the petty bag office, and serve notice thereof in writing at the last known residence or place of business of such grantee or grantees; and such register or a copy shall be open to the inspection of the public at the office of the Commissioners, subject to such regulations as the Commissioners may make: Provided always, that in any proceeding in Scotland to repeal any letters patent, service of all writs and summonses shall be made according to the existing forms and practice; provided also, that the grantee or grantees of letters patent to be hereafter granted

¹ It was held by the Court of Queen's Bench in *Chollet v. Hoffman* (7 Ell. & Bl. 686), that under this clause an assignee cannot bring an action for an infringement until his assignment has been registered; but see the cases of *Hassall v. Wright* and *Ellwood v. Christy*, cited at p. 220 ante, where other cases decided upon this section will be found.—*Eds.*

Chancery, or in the custody of the May , Scotland, or Ireers patent had been keeper of the public records, to be trar the office appointed for filing specific .d or Scotland or Irees shall have the same this Act.

Commissioners specifications, etc.; such speci ficutions, etc., may be printed and published.

32. The Commissioners shall shall be subject to the like to cause indexes to be made to old tions, disclaimers, and memors should and would have had to be hereafter enrolled or assignment of letters patent prepared in such form as t u, or Scotland before the passing shall be open to the insp

> places as the Commiss' , any proviso that may exist in former regulations to be m all be lawful for a larger number than missioners may car fter to have a legal and beneficial interest disclaimers, and

> disclaimers, and lished, and ser cause to be made Commission in the said register of proprietors, or shall

33. Co forge, or cause to be made or forged, any firstions, etc., as printed by Queen's printers to be evidence.

jesty, of purporting to be a copy of any entry in the ration or shall produce or tender, or cause to be protake tendered, in evidence, any such protection of the residence of t tendered, in evidence, any such writing knowing to be false or forged, he shall be guilty of a mismor, and shall be punished by fine and imprisonment

Register of

Copies of speci-

dingly. 38. If any person shall deem himself aggrieved by any made under colour of this Act in the said register of proprietors, it shall be lawful for such person to apply, by motion, to the Master of the Rolls, or to any of the courts of common law at Westminster in term time, or by summons to a judge of any of the said courts in vacation, for an order that such entry may be expunged, vacated, or varied; and upon any such application the Master of the Rolls, or such court or judge respectively, may make such order for expunging, vacating, or varying such entry, and as to the costs of such application, as to the said Master of the Rolls or to such court or judge may seem fit; and the officer having the care and custody of such register, on the production to him of any such order for expunging, vacating, or varying any such entry, shall expunge, vacate, or vary the same, according to the requisitions of such order.

provisions of 5 & 39. All the provisions of the Acts of the session holden in 6 Wm. IV. c. 83, and of 7 & 8 Vict. the fifth and sixth years of King William the Fourth, chapter e. 60, as to disclaimers and me eighty-three, and of the session holden in the seventh and moranda of alte- eighth years of her Majesty, chapter sixty-nine, respectively,

relating to disclaimers and memoranda of alterations in letters rations to apply patent and specifications, except as hereinafter provided, shall this Act. be applicable and apply to any letters patent granted and to any specification filed under the provisions of this Act: Provided always, that all applications for leave to enter a disclaimer or memorandum of alteration shall be made, and all caveats relating thereto shall be lodged at the office of the commissioners, and shall be referred to the respective law officers in the said first-recited Act mentioned: Provided Applications for also, that every such disclaimer or memorandum of alteration disclaimers and cayeats to be at shall be filed in the office appointed for filing specifications in office of commissioners. Chancery under this Act, with the specification to which the same relates, in lieu of being entered or filed and enrolled as required by the said first-recited Act, or by the Act of the session holden in the twelfth and thirteenth years of her Majesty, chapter one hundred and nine, and the said Acts shall be construed accordingly: Provided also, that such filing of any disclaimer or memorandum of alteration, in pursuance of the leave of the law officer in the first-recited Act mentioned, certified as therein mentioned, shall, except in cases of fraud, be conclusive as to the right of the party to enter such disclaimer or memorandum of alteration under the said Acts and this Act; and no objection shall be allowed to be made in any proceeding upon or touching such letters patent, specification, disclaimer, or memorandum of alteration, on the ground that the party entering such disclaimer or memorandum of alteration had not sufficient authority in that behalf: Provided also, that no action shall be brought upon any letters patent in which or on the specification of which any disclaimer or memorandum of alteration shall have been filed in respect of any infringement committed prior to the filing of such disclaimer or memorandum of alteration, unless the law officer shall certify in his fiat that any such action may be brought, notwithstanding the entry or filing of such disclaimer or memorandum of alteration.

40. All the provisions of the said Act of the fifth and Provisions of sixth years of King William the Fourth for the confirmation \$2.6 Wm. IV.
of any letters patent, and the grant of the new letters c. 67; and 72.8
retent and all the provisions of the said Act and of the Act. patent, and all the provisions of the said Act, and of the Acts confirmation and of the session holden in the second and third years of her apply to patents Majesty, chapter sixty-seven, and of the session holden in the under this Act. seventh and eighth years of her Majestv, chapter sixty-nine,

restrictions, conditions, or provisoes which her Majesty may think fit, in addition to or in substitution for any restrictions, conditions, or provisoes which would otherwise be inserted therein under this Act; and it shall also be lawful for her Majesty, by like warrant, to direct any complete specification which may have been filed under the provisions hereinbefore contained, and in respect of the invention described, in which no letters patent may have been granted, to be cancelled, and thereupon the protection obtained by the filing of such complete specification shall cease.

Letters patent to be made subject to avoidance on non-fulfilment of certain conditions.

17. All letters patent for inventions granted under the provisions hereinbefore contained shall be made subject to the condition that the same shall be void, and that the powers and privileges thereby granted shall cease and determine, at the expiration of three years and seven years respectively from the date thereof, unless there be paid, before the expiration of the said three and seven years respectively, the sum or sums of money and stamp duties in the schedule to this Act annexed; and the payment of the said sums of money and stamp duties respectively shall be endorsed on the warrant for the said letters patent; and such officer of the Commissioners as may be appointed for this purpose shall issue under the seal of the Commissioners a certificate of such payment, and shall endorse a receipt for the same on any letters patent issued under the authority of the said warrant; and such certificate, duly stamped, shall be evidence of the payment of the several sums respectively. [Repealed by Act 16 Vict. cap. 5.

Letters patent issued under the great seal to be valid for the whole of the United Kingdom, the Channel Islands, and the Isle of Man.

18. The Commissioners, so soon after the sealing of the said warrant as required by the applicant for the letters patent, shall cause to be prepared letters patent for the invention, according to the tenor of the said warrant, and it shall be lawful for the Lord Chancellor to cause such letters patent to be sealed with the great seal of the United Kingdom, and such letters patent so sealed shall extend to the whole of the United Kingdom of Great Britain and Ireland, the Channel Islands, and the Isle of Man; and in case such warrant so direct, such letters patent shall be made applicable to her Majesty's colonies and plantations abroad, or such of them as may be mentioned in such warrant; and such letters patent shall be valid and effectual as to the whole of such United Kingdom, and the said islands and isle, and the said colonies

or plantations, or such of them as aforesaid, and shall confer the like powers, rights, and privileges as might, in case this Act had not been passed, have been conferred by several letters patent of the like purport and effect passed under the great seal of the United Kingdom, under the seal appointed to be used instead of the great seal of Scotland, and under the great seal of Ireland respectively, and made applicable to England, the dominion of Wales, the town of Berwick-upon-Tweed, the Channel Islands, and Isle of Man, and the said colonies and plantations, or such of them as aforesaid, to Scotland, and to Ireland respectively, save as herein otherwise provided: Provided always, that nothing in this Act contained Nothing to give shall be deemed or taken to give any effect or operation to effect to any letters patent any letters patent to be granted under the authority of this granted in any colony. Act in any colony in which such or the like letters patent would be invalid by the law in force in the same colony for the time being: Provided always, that a transcript of such letters shall, so soon after the sealing of the same and in such manner as the Commissioners shall direct, be transmitted to the Director of Chancery in Scotland, and be recorded in the records of Chancery in Scotland, upon payment of such fees as the Commissioners shall appoint, in the same manner and to the same effect in all respects as letters patent passing under the seal appointed by the treaty of union to be used in place of the great seal of Scotland have heretofore been recorded, and extracts from the said records shall be furnished to all parties requiring the same, on payment of such fees as the Commissioners shall direct, and shall be received in evidence in all courts in Scotland to the like effect as the letters patent themselves.

19. Provided always, that no letters patent, save as herein-Noletters patent after mentioned in the case of letters patent destroyed or lost, three months shall issue on any warrant granted as aforesaid, unless applica-from date of warrant. tion be made to seal such letters patent within three months after the date of the said warrant.

20. Provided also, that no letters patent (save letters patent No letters patent issued in lieu of others destroyed or lost) shall be issued or be (except in lieu of those lost, etc.) of any force or effect unless the same be granted during the to be issued after continuance of the provisional protection under this Act, or this Act. where a complete specification has been deposited under this this Act. Act, then unless such letters patent be granted during the continuance of the protection conferred under this Act by

mentioned came in question; and the record, with such certificate, being given in evidence in any suit or action for infringing the said letters patent, or in any proceeding by scire facias to repeal the letters patent, shall entitle the plaintiff in any such suit or action, or the defendant in such proceeding by scire facias, on obtaining a decree, decretal order, or final judgment to his full costs, charges, and expenses, taxed as between attorney and client,2 unless the judge making such decree or order, or the judge trying such action or proceeding, shall certify that the plaintiff or defendant respectively ought not to have such full costs: Provided always, that nothing herein contained shall affect the jurisdiction and forms of process of the courts in Scotland in any action for the infringement of letters patent, or in any action or proceeding respecting letters patent hitherto competent to the said courts: Provided also, that when any proceedings shall require to be taken in Scotland to repeal any letters patent, such proceedings shall be taken in the form of an action of reduction at the instance of her Majesty's advocate, or at the instance of any other party having interest, with concurrence of her Majesty's advocate, which concurrence her Majesty's advocate is authorized and empowered to give upon just cause shown only.

Payments and stamp duties on letters patent to be as in schedule. 44. There shall be paid in respect of letters patent applied for or issued as herein mentioned, the filing of specifications and disclaimers, certificates, entries and searches, and other matters and things mentioned in the schedule to this Act, such fees as are mentioned in the said schedule; and there shall be paid unto and for the use of her Majesty, her heirs and successors, for or in respect of the warrants and certificates mentioned in the said schedule, or the vellum, parchment, or paper on which the same respectively are written, the stamp duties mentioned in the said schedule; and no other stamp duties shall be levied, or fees, except as hereinafter mentioned, taken in respect to such letters patent and specifications, and

¹ This certificate may be given on a trial in the Court of Chancery (Needham v. Oxley, 8 L. T. N. S. 604; Davenport v. Rylands, 1 Law Rep. Eq. 308).

Eq. 308).

As to what is a sufficient certificate to enable the Court to direct the costs to be thus taxed, see Betts v. De Vitre (11 Jur. n. s. 11); Bovill v. Hadley (17 C. B. n. s. 435; S. C. 10 L. T. n. s. 650). A patentee who has once obtained this certificate may have his full costs in any subsequent action for infringement, even although the validity of the patent may not have been questioned in such action. Davenport v. Rylands (1 Law Rep. Eq. 308; S. C. 35 L. J. n. s. Ch. 204).

the matters and things in such schedule mentioned. ΓRe pealed by Act 16 Vict. cap. 5.]

45. The stamp duties hereby granted shall be under the Duties to be care and management of the Commissioners of inland reve-under management of commissioners of inland reve-under management of commissioners of inland revenue; and the several rules, regulations, provisions, penalties, sioners of Inland Revenue. clauses, and matters contained in any Act now or hereafter to be in force with reference to stamp duties shall be applicable Repealed by Act 16 Vict. cap. 5.7

46. The fees to be paid as aforesaid shall from time to time All moneys rebe paid into the receipt of the exchequer, and be carried to ceived to be paid into the receipt of the exchequer, and made part of the consolidated fund of the United King-dated Fund. Repealed by Act 16 Vict. cap. 5.7

47. Provided always, that nothing herein contained shall Not to prevent prevent the payment as heretofore to the law officers in cases to law officers in of opposition to the granting of letters patent, and in cases of cases of opposidisclaimers and memoranda of alterations, of such fees as may be appointed by the Lord Chancellor and Master of the Rolls as the fee to be paid on the hearing of such oppositions and in the case of disclaimers and memoranda of alterations respectively, or of such reasonable sums for office or other copies of documents in the office of the Commissioners as the Commissioners may from time to time appoint to be paid for such copies; and the Lord Chancellor and Master of the Rolls, and the Commissioners, are hereby respectively authorized and empowered to appoint the fees to be so paid in respect of such oppositions, disclaimers, and memoranda of alterations respectively, and for such office or other copies.1

48. It shall be lawful for the Commissioners of her Ma- Fees and salaries jesty's treasury from time to time to allow such fees to the of officers. law officers and their clerks (for duties under this Act, in respect of which fees may not be payable to them under the provisions lastly hereinbefore contained), as the Lord Chancellor and Master of the Rolls may from time to time appoint, and to allow such salaries and payments to any clerks and officers to be appointed under this Act and such additional salaries and payments to any other clerks and officers in respect of any additional duties imposed on them by this Act, as the said Commissioners of the treasury may think fit.

49. It shall be lawful for the Commissioners of her Ma-Sums for defrayjesty's treasury to allow from time to time the necessary sums expenses under

1 See the Order of St. Leonards and Sir John Romilly, of the 1st Oct., paid out of moneys to be 1852.—*Eds*.

ing sularies and this Act to be

provided by Par- for providing offices under this Act, and for the fees, salaries, and payments allowed by them as aforesaid, and for defraying the current and incidental expenses of such office or offices; and the sums to be so allowed shall be paid out of such moneys as may be provided by Parliament for that purpose.

Power to Tres sury to grant compensation to persons affected by this Act.

50. And whereas divers persons, by virtue of their offices or appointments, are entitled to fees or charges payable in respect of letters patent as heretofore granted within the United Kingdom of Great Britain and Ireland, or have and derive in respect of such letters patent, or the procedure for the granting thereof, fees or other emoluments or advantages; it shall be lawful for the said Commissioners of the treasury to grant to any such persons who may sustain any loss of fees, emoluments, or advantages, by reason of the passing of this Act, such compensation as, having regard to the tenure and nature of their respective offices and appointments, such Commissioners deem just and proper to be awarded; and all such compensations shall be paid out of such moneys as may be provided by Parliament for that purpose: Provided always, that in case any person to whom any yearly sum by way of compensation shall be awarded and paid shall, after the passing of this Act, be appointed to any office or place of emolument under the provisions of this Act, or in the public service, then and in every such case the amount of such yearly sum shall in every year be diminished by so much as the emoluments of such person for such year from such office or place shall amount to, and provision in that behalf shall be made in the award to him of such yearly sum.

Account of sala ries, fees, and compensation allowances to be laid before Parliament.

51. An account of all salaries, fees, allowances, sums, and compensations to be appointed, allowed, or granted under this Act shall, within fourteen days next after the same shall be so appointed, allowed, or granted respectively, be laid before both Houses of Parliament, if Parliament be then sitting, or if Parliament be not then sitting, then within fourteen days after the next meeting of Parliament.

Not to extend to patents applied for before commencement of Act

- As to letters pa-tent granted before commencement of this Act
- 52. Letters patent may be granted in respect of applications made before the commencement of this Act, in like manner and subject to the same provisions as if this Act had not been passed.
- 53. Where letters patent for England or Scotland or Ireland have been granted before the commencement of this Act, or are, in respect of any application made before the

commencement of this Act, hereafter granted, for any inven- for England, tion, letters patent for England or Scotland or Ireland may land. be granted for such invention in like manner as if this Act had not been passed: Provided always, that in lieu of all the fees or payments and stamp duties now payable in respect of such letters patent, or in or about obtaining a grant thereof, there shall be paid in respect of such letters patent for England or Scotland or Ireland on the sealing of such respective letters patent a sum equal to one-third part of the fees and stamp duties which would be payable according to the schedule to this Act in respect of letters patent issued for the United Kingdom under this Act, on or previously to the sealing of such letters patent, and at or before the expiration of the third year and the seventh year respectively of the term granted by such letters patent for England or Scotland or Ireland, sums equal to one-third part of the fees and stamp duties payable at the expiration of the third year and the seventh year respectively of the term granted by letters patent issued for the United Kingdom under this Act; and the condition of such letters patent for England or Scotland or Ireland shall be varied accordingly; and such fees shall be paid to such persons as the Commissioners of her Majesty's treasury shall appoint, and shall be carried to and form part of the said consolidated fund. [Repealed by Act 16 Vict. cap. 5.]

54. The several forms in the schedule to this Act may be Forms in scheused for and in respect of the several matters therein men-dule may be used. tioned, and the Commissioners may where they think fit vary such forms as occasion may require, and cause to be printed and circulated such other forms as they may think fit to be used for the purposes of this Act.

55. In the construction of this Act the following expres- Interpretation of sions shall have the meanings hereby assigned to them, unless terms. such meanings be repugnant to or inconsistent with the context; (that is to say,)

The expression "Lord Chancellor" shall mean the Lord Chancellor or Lord Keeper of the Great Seal, or Lords Commissioners of the Great Seal:

The expression "The Commissioners" shall mean the Commissioners for the time being acting in execution of this Act:

The expression "Law Officer" shall mean her Majesty's Attorney-General or Solicitor-General for the time being for England, or the Lord Advocate, or her Majesty's Solicitor-General for the time being for Scotland, or her Majesty's Attorney-General or Solicitor-General for the time being for Ireland:

The expression "Invention" shall mean any manner of new manufacture the subject of letters patent and grant of privilege within the meaning of the Act of the twentyfirst year of the reign of King James the First, Chapter Three:

The expressions "Petition," "Declaration," "Provisional Specification," "Warrant," and "Letters Patent" respectively, shall mean instruments in the form and to the effect in the schedule hereto annexed, subject to such alterations as may from time to time be made therein under the powers and provisions of this Act.

Short title.

56. In citing this Act in other Acts of Parliament, instruments, and proceedings, it shall be sufficient to use the expression "The Patent Law Amendment Act, 1852."

Commencement of Act.

57. This Act shall commence and take effect from the first of October, one thousand eight hundred and fifty-two.

The Schedule to which this Act refers.—[See Sect. 44.]

[The first part of this Schedule, defining the fees and stamp duties to be paid, was repealed by Act 16 Vict. cap. 5, and a schedule of stamp duties thereto annexed substituted for the part so repealed.]

FEES TO BE PAID.

On leaving petition for grant of letters patent £	5 0	0
On notice of intention to proceed with the appli-		
cation	5 0	0
On sealing of letters patent	5 0	0
On filing of specification	5 0	0
At or before the expiration of the third year 4	0 0	0
At or before the expiration of the seventh year . 8	0 0	0
On leaving notice of objections	2 0	0
Every search and inspection	0 1	0
77	0 5	0
Certificate of assignment or licence	0 5	0
	5 0	0
Caveat against disclaimer	2 0	. 0

STAMP DUTIES TO BE PAID.

On	warrant of law officer for letters patent .		£5	0	0
	certificate of payment of the fee payable at				
	before the expiration of the third year .		10	0	0
On	certificate of payment of the fee payable at	or			
	before the expiration of the seventh year		20	0	0

FORMS.1

No.

PETITION.

To the Queen's most excellent Majesty.

The humble petition of [here insert name and address of petitioner] for, &c., showeth,

That your petitioner is in possession of an invention for [the title of the invention,] which invention he believes will be of great public utility; that he is the true and first inventor thereof; and that the same is not in use by any other person or persons, to the best of his knowledge and belief.

Your petitioner therefore humbly prays, that your Majesty will be pleased to grant unto him, his executors, administrators, and assigns, your royal letters patent for the United Kingdom of Great Britain and Ireland, the Channel Islands, the Isle of Man, [Colonies to be mentioned, if any,] for the term of fourteen years, pursuant to the statutes in that case made and provided.

And your petitioner will ever pray, &c.

No.

DECLARATION.

I, A. B., of, &c., do solemnly and sincerely declare, that I am in possession of an invention for, &c., [the title as in petition,] which invention I believe will be of great public utility; that I am the true and first inventor thereof; and that the same is not in use by any other person or persons, to the best of my knowledge and belief; [where a complete specification is to be filed with the petition and declaration, insert these words:—
"and that the instrument in writing under my hand and seal,

¹ These forms may be varied by the Commissioners of Patents, as the occasion may require: 15 & 16 Vict. c. 83, s. 54.—Eds.

hereunto annexed, particularly describes and ascertains the nature of the said invention, and the manner in which the same is to be performed;" and I make this declaration conscientiously believing the same to be true, and by virtue of the provisions of an Act made and passed in the session of Parliament held in the fifth and sixth years of the reign of his late Majesty King William the Fourth, intituled "An Act to repeal an Act of the present Session of Parliament, intituled 'An Act for the more effectual Abolition of Oaths and Affirmations taken and made in various departments of the State, and to substitute Declarations in lieu thereof, and for the more entire suppression of voluntary and extra-judicial Oaths and Affidavits," and to make other provisions for the Abolition of unnecessary Oaths."

A. B.

Declared at this day of A.D. before me,

A Master in Chancery, or Justice of the Peace.

No.

PROVISIONAL SPECIFICATION.

I, A. B., do hereby declare the nature of the said invention for [insert title as in petition] to be as follows: [here insert description.]

Dated this

day of A.D. (To be signed by applicant or his agent.)

REFERENCE.

(To be endorsed on the petition.)

Her Majesty is pleased to refer this petition to to consider what may be properly done therein.

Clerk of the Commissioners.

WARRANT.

In humble obedience to her Majesty's command referring to me the petition of A. B., of, &c., to consider what may be properly done therein, I do hereby certify as follows: That the said petition sets forth that the petitioner [allegations of the petition].

And the petitioner most humbly prays [prayer of the

petition.

That in support of the allegations contained in the said petition the declaration of the petitioner has been laid before me, whereby he solemnly declares, that [allegations of the declaration].

That there has also been laid before me [a provisional specification signed A. B., and also a certificate, ,] or [a complete specification, and a certificate of the filing thereof,] whereby it appears that the said invention was provisionally protected [or protected] from the day of

A.D. in pursuance of the statute:

That it appears that the said application was duly advertised:

Upon consideration of all the matters aforesaid, and as it is entirely at the hazard of the said petitioner whether the said invention is new or will have the desired success, and as it may be reasonable for her Majesty to encourage all arts and inventions which may be for the public good, I am of opinion, that her Majesty may grant her royal letters patent unto the petitioner, his executors, administrators, and assigns for his said invention within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, [Colonies to be mentioned, if any,] for the term of fourteen years, according to the statute in that case made and provided, if her Majesty shall be graciously pleased so to do, to the tenor and effect following:—

[See next form.]

Given under my hand, this day of A.D. (Seal of the commissioners.)

LETTERS PATENT.1

Victoria, by the grace of God, of the United Kingdom of Great Britain and Ireland, Queen, defender of the faith: To all to whom these presents shall come, greeting:

¹ The above form, being the one in actual use, has been substituted for the form given in the schedule to the Act. See Section 54.—Eds.

Whereas A. B. hath by his petition humbly represented unto us that he is in possession of an invention for which the petitioner believes will be of great public utility; that he is the first and true inventor thereof, and that the same is not in use by any other person or persons, to the best of his knowledge and belief: The petitioner therefore most humbly prayed that we would be graciously pleased to grant unto him, his executors, administrators, and assigns, our royal letters patent for the sole use, benefit, and advantage of his said invention within our United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, for the term of fourteen years, pursuant to the statute in that case made and provided: And we, being willing to give encouragement to all arts and inventions which may be for the public good, are graciously pleased to condescend to the petitioner's request: Know ye, therefore, that we, of our especial grace, certain knowledge, and mere motion have given and granted, and by these presents, for us, our heirs and successors, do give and grant unto the said A. B., his executors, administrators, and assigns, our especial licence, full power, sole privilege, and authority, that he the said A. B., his executors, administrators, and assigns, and every of them, by himself and themselves, or by his and their deputy or deputies, servants, or agents, or such others as he the said A. B., his executors, administrators, or assigns, shall at any time agree with, and no others, from time to time and at all times hereafter during the term of years herein expressed, shall and lawfully may make, use, exercise, and vend his said invention within our United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, in such manner as to him the said A. B., his executors, administrators, and assigns, or any of them, shall in his or their discretion seem meet; and that he the said A. B., his executors, administrators, and assigns, shall and lawfully may have and enjoy the whole profit, benefit, commodity, and advantage from time to time coming, growing, accruing, and arising by reason of the said invention, for and during the term of years herein men-

In case a complete specification has been filed in the first instance, the letters patent will contain this recital, "And whereas the said A. B. hath particularly described and ascertained the nature of the said invention, and in what manner the same is to be performed, by an instrument in writing under his hand and seal, and has caused the same to be filed in the Great Seal Patent Office."—Eds.

tioned; to have, hold, exercise, and enjoy the said licences, powers, privileges, and advantages hereinbefore granted or mentioned to be granted unto the said A. B., his executors, administrators, and assigns, for and during and unto the full end and term of fourteen years from the day of the date of these presents next and immediately ensuing, according to the statute in such case made and provided; and to the end that he the said A. B., his executors, administrators, and assigns, and every of them, may have and enjoy the full benefit and the sole use and exercise of the said invention, according to our gracious intention hereinbefore declared, we do by these presents, for us, our heirs and successors, require and strictly command all and every person and persons, bodies politic and corporate, and all other our subjects whatsoever, of what estate, quality, degree, name, or condition soever they be, within our United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, that neither they nor any of them, at any time during the continuance of the said term of fourteen years hereby granted, either directly or indirectly do make, use, or put in practice the said invention, or anypart of the same, so attained unto by the said A. B. as aforesaid, nor in anywise counterfeit, imitate, or resemble the same, nor shall make or cause to be made any addition thereunto or subtraction from the same, whereby to pretend himself or themselves the inventor or inventors, devisor or devisors thereof, without the consent, licence, or agreement of the said A. B., his executors, administrators, or assigns, in writing under his or their hands and seals first had and obtained in that behalf, upon such pains and penalties as can or may be justly inflicted on such offenders for their contempt of this our royal command, and further to be answerable to the said A. B., his executors, administrators, and assigns, according to law, for his and their damages thereby occasioned: And moreover we do by these presents, for us, our heirs and successors, will and command all and singular the justices of the peace, mayors, sheriffs, bailiffs, constables, headboroughs, and all other officers and ministers whatsoever of us, our heirs and successors, for the time being, that they or any of them do not nor shall at any time during the said term hereby granted, in anywise molest, trouble, or hinder the said A. B., his executors, administrators, or assigns, or any of them, or his or their deputies, servants, or agents, in or about the due and lawful

use or exercise of the aforesaid invention, or anything relating thereto: Provided always, and these our letters patent are and shall be upon this condition, that if at any time during the said term hereby granted it shall be made appear to us, our heirs or successors, or any six or more of our or their privy council, that this our grant is contrary to law, or prejudicial or inconvenient to our subjects in general, or that the said invention is not a new invention as to the public use and exercise thereof within our United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, or that the said A. B. is not the first and true inventor thereof within this realm as aforesaid, these our letters patent shall forthwith cease, determine, and be utterly void to all intents and purposes, anything hereinbefore contained to the contrary thereof in anywise notwithstanding: Provided also, that these our letters patent, or anything herein contained, shall not extend or be construed to extend to give privilege unto the said A. B., his executors, administrators, or assigns, or any of them, to use or imitate any invention or work whatsoever which hath heretofore been found out or invented by any other of our subjects whatsoever, and publicly used or exercised within our United Kingdom of Great Britain and Ireland, the Channel Islands, or Isle of Man, unto whom our like letters patent or privileges have been already granted for the sole use, exercise, and benefit thereof: It being our will and pleasure that the said A. B., his executors, administrators, and assigns, and all and every other person and persons to whom like letters patent or privileges have been already granted as aforesaid, shall distinctly use and practise their several inventions by them invented and found out, according to the true intent and meaning of the same respective letters patent and of these presents: Provided likewise nevertheless, and these our letters patent are upon this express condition, that if the said A. B., his executors or administrators, shall not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed, by an instrument in writing under his or their or one of their hands and seals, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of these our letters patent; and also if the said A. B., his executors, ad-

¹ In case a complete specification shall have been filed along with the petition and declaration, the preceding proviso will be modified thus—

ministrators, or assigns, shall not pay the stamp duty of fifty pounds, and produce these our letters patent stamped with a proper stamp to that amount at the office of our Commissioners of Patents for inventions before the expiration of three years from the date of these our letters patent, pursuant to the provisions of the Act of the sixteenth year of our reign, chapter 5; and also if the said A. B., his executors, administrators, or assigns, shall not pay the stamp duty of one hundred pounds, and produce these our letters patent stamped with a proper stamp to that amount at the said office of our said Commissioners before the expiration of seven years from the date of these our letters patent, pursuant also to the said Act; and also if the said A. B., his executors, administrators, or assigns, shall not supply or cause to be supplied for our service all such articles of the said invention as he or they shall be required to supply by the officers or Commissioners administering the department of our service for the use of which the same shall be required in such manner, at such times, and at and upon such reasonable prices and terms as shall be settled for that purpose by the said officers or Commissioners requiring the same: that then and in any of the said cases these our letters patent, and all liberties and advantages whatsoever hereby granted, shall utterly cease, determine, and become void, anything hereinbefore contained to the contrary thereof in anywise potwithstanding: Provided that nothing herein contained shall prevent the granting of licences in such manner and for such considerations as they may by law be granted: And lastly, we do by these presents, for us, our heirs and successors, grant unto the said A. B., his executors, administrators, and assigns, that these our letters patent, or the filing thereof, shall be in and by all things good, firm, valid, sufficient, and effectual in the law according to the true intent and meaning thereof, and shall be taken, construed, and adjudged in the most favourable and beneficial sense for the best advantage of the said A. B., his executors, administrators, and assigns, as well in all our courts of record as elsewhere, and by all and singular the officers and ministers whatsoever of us, our heirs and successors, in our United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man,

[&]quot;That if the said instrument in writing, filed as aforesaid, does not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed."—Eds.

and amongst all and every the subjects of us, our heirs and successors, whatsoever and wheresoever, notwithstanding the not full and certain describing the nature or quality of the said invention, or of the materials thereunto conducing and belonging. In witness whereof we have caused these our letters to be made patent, this one thousand eight hundred and seventy , in the year of our reign, and to be sealed as of the said one thousand eight hundred and seventy

By warrant.

send greeting:

SPECIFICATION.

To all to whom these presents shall come:

I, A. B., of

Whereas her most excellent Majesty Queen Victoria, by her letters patent bearing date the day of , in the year of her reign, did for her-A.D. self, her heirs and successors, give and grant unto me, the said A. B., her special licence that I the said A. B., my executors, administrators, and assigns, or such others as I the said A. B., my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, [Colonies to be mentioned, if any,] an invention for [insert title as in letters patent] upon the condition (amongst others) that I, the said A. B., by an instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said invention, and in what manner the same was to be performed, and cause the same to be filed in within calendar months next and immediately after the date of the said letters patent: Now know ye, that I, the said A. B., do hereby declare the nature of my said invention, and in what manner the same is

[Describe the invention.]

to be performed, to be particularly described and ascertained

in and by the following statement: (that is to say,)

In witness whereof I the said A. B. have hereunto set my hand and seal, this day of A.D.

16 VICT. C. 5.

An Act to Substitute Stamp Duties for Fees on passing Letters Patent for Inventions, and to provide for the Purchase, for the public use, of certain Indexes of Specifications.

[21st February, 1853.]

WHEREAS it is expedient that the fees payable in respect of 15 and 16 Vict. letters patent for inventions under the Patent Law Amend- c. 83. ment Act, 1852, and mentioned in the schedule to such Act, be converted into stamp duties: Be it enacted, therefore, by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. Sections seventeen, forty-four, forty-five, forty-six, and Sections 17, 44, fifty-three of the said Patent Law Amendment Act, 1852, and part of and so much of the schedule to the said Act as relates to fees schedule, of recited Act reand stamp duties to be paid under the said Act, shall be pealed. repealed.

2. All letters patent for inventions to be granted under Letters patent to the provisions of the said Patent Law Amendment Act, 1852 to avoidance on (except in the cases provided for in the fourth section of this non-payment of this stamp duties ex-Act), shall be made subject to the condition that the same pressed in scheshall be void, and that the powers and privileges thereby annexed. granted shall cease and determine, at the expiration of three years and seven years respectively from the date thereof. unless there be paid before the expiration of the said three years and seven years respectively the stamp duties in the schedule to this Act annexed, expressed to be payable before the expiration of the third year and of the seventh year respectively, and such letters patent, or a duplicate thereof, shall be stamped with proper stamps showing the payment of such respective stamp duties, and shall, when stamped, be produced before the expiration of such three years and seven years respectively at the office of the Commissioners: and a certificate of the production of such letters patent or duplicate so stamped, specifying the date of such production, shall be endorsed by the clerk of the Commissioners on the letters patent or duplicate, and a like certificate shall be endorsed upon the warrant for such letters patent filed in the said office.

Stamp duties schedule to this Act to be pay-

3. There shall be paid unto and for the use of her Majesty, mentioned in the her heirs and successors, for or in respect of letters patent applied for or issued under the provisions of the said Patent Law Amendment Act, 1852, warrants, specifications, disclaimers, certificates, and entries, and other matters and things mentioned in the schedule to this Act, or the vellum, parchment, or paper on which the same respectively are written, the stamp duties mentioned in the said schedule; and no other stamp duties shall be levied in respect of such letters patent, warrants, specifications, disclaimers, certificates, entries, matters, and things; and the stamp duty mentioned in the said schedule on office copies of documents shall be in lieu of such sums as by the said Patent Law Amendment Act, 1852, are authorized to be appointed to be paid for such office copies.

As to payment of stamp duties

4. Where letters patent for England or Scotland or Ireland have been granted before the commencement of the said on letters patent of the said on letters patent. Patent Law Amendment Act, 1852, or have been since the Scotland, or Ireland, commencement of the said Act, or hereafter may be granted land respectively. for any invention, in respect of any application made before the commencement of the said Act, letters patent for England or Scotland or Ireland may be granted for such invention in like manner as if the said Act had not been passed: Provided always, that in lieu of all fees or payments and stamp duties which were at the time of the passing of the said Act payable in respect of such letters patent as last aforesaid, or in or about obtaining a grant thereof, and in lieu of all other stamp duties whatsoever, there shall be paid in respect of such letters patent as last aforesaid on the sealing thereof stamp duties equal to one-third part of the stamp duties which would be payable under this Act in respect of letters patent issued for the United Kingdom under the said Patent Law Amendment Act, 1852, on or previously to the sealing of such letters patent as last aforesaid, and before the expiration of the third year and the seventh year respectively of the term granted by such letters patent for England, Scotland, or Ireland, stamp duties equal to one-third part of the stamp duties payable under this Act before the expiration of the third year and the seventh year respectively of the term granted by letters patent issued for the United Kingdom under the said Patent Law Amendment Act, 1852, and the condition of such letters patent for England or Scotland or Ireland shall be varied accordingly.

5. The stamp duties hereby granted shall be under the Duties to be care and management of the Commissioners of Inland Remanagement of venue; and the several rules, regulations, provisions, penalsioners of Inlan ties, clauses, and matters contained in any Act now or here- Revenue; after to be in force, with reference to stamp duties shall be applicable thereto.

6. The said Commissioners of Inland Revenue shall pre-who are to propare stamps impressed upon adhesive paper, of the amounts stamps for the following—that is to say, twopence, fourpence, eightpence, purpose. and one shilling, to be used only in respect of the stamp duties on the office copies of documents, and on the certificates of searches and inspections mentioned in the schedule to this Act; such adhesive stamps of proper amounts to be affixed by the clerk of the Commissioners of patents for inventions to such office copies of documents and certificates of searches and inspections as aforesaid; and immediately after such affixing he shall obliterate or deface such stamps by impressing thereon a seal to be provided for that purpose, but

so as not to prevent the amount of the stamp from being ascertained; and no such office copy or certificate shall be delivered out until the stamps thereon shall be obliterated or

defaced as aforesaid.

7. The condition contained in any letters patent granted conditions of under the said Patent Law Amendment Act, 1852, and be-letters patent alfore the passing of this Act, for making such letters patent ander recited Act to be satisfied. void at the expiration of three years and seven years respectively from the date thereof, unless there be paid, before the etc., under this expiration of the said three years and seven years respectively, Act. the sums of money and stamp duties by the said Patent Law Amendment Act, 1852, required in this behalf, shall be deemed to be satisfied and complied with by payment of the like stamp duties as would have been required if such letters patent had been granted after the passing of this Act, and had been made subject to the condition required by this Act in lieu of the said condition therein contained; and the provision hereinbefore contained concerning the endorsement on the letters patent or duplicate, and on the warrant for the same letters patent, of a certificate of the production of the letters patent or duplicate properly stamped, shall be applicable in the case of such letters patent granted before the passing of this Act.

8. And whereas by the said Patent Law Amendment Act, Power to com-

missioners to purchase the indexes of existing specifications prepared by Mr. Woodcroft,

1852, the Commissioners are directed to cause indexes to all specifications heretofore or hereafter to be enrolled or deposited to be prepared in such form as they may think fit, which indexes are to be open to the inspection of the public: and whereas the existing specifications so directed to be indexed as aforesaid are in number fifteen thousand and upwards, and it would require some years to make indexes thereof on a proper arrangement and classification: and whereas Mr. Bennett Woodcroft has already made complete indexes of such specifications, which the Commissioners have examined and approved of, and it is expedient that such indexes be purchased for the use of the public: it shall be lawful for the Commissioners, with the consent of the Commissioners of her Majesty's treasury, to purchase the said indexes of the said Bennett Woodcroft for a sum not exceeding one thousand pounds, and to pay the purchase money for the same out of the moneys in their hands which have arisen from fees received in respect of letters patent under the said Patent Law Amendment Act, 1852, and directed by the said Act to be put into the receipt of the exchequer; and after the purchase of such indexes the provisions of the said Act shall be applicable thereto as if such indexes had been prepared under the said recited enactment.

As to the word "duplicate."

9. The word "duplicate" shall be construed to mean in this Act such letters patent as may be issued under the twentysecond section of the Patent Law Amendment Act, 1852, in case of any letters patent being destroyed or lost.

This Act and 15 and 16 Vict. c. 83 to be construed together.

10. This Act and the Patent Law Amendment Act, 1852, shall be construed together as one Act.

The Schedule of Stamp Duties to be paid to which this Act refers.

On petition for grant of letters patent	£5	0	0
On certificate of record of notice to proceed	5	0	0
On warrant of law officer for letters patent	5	0	0
On the sealing of letters patent	5	0	0
On specification	5	0	0
On the letters patent, or a duplicate thereof, before the expiration of the third year	50	0	0
On the letters patent, or a duplicate thereof, before the expiration of the seventh year	100	0	0

16 & 17 VICT. C. 115.

An Act to amend certain Provisions of the Patent Law Amendment Act, 1852, in respect of the transmission of Certified Copies of Letters Patent Specifications to certain Offices in Edinburgh and Dublin, and otherwise to amend the said Act.

[20th August, 1853.]

WHEREAS it is expedient to amend certain provisions of the 15 & 16 Vict. Patent Law Amendment Act, 1852, in respect of the trans-c. 83. mission of certified copies of letters patent and specifications to certain offices in Edinburgh and Dublin, and otherwise to amend the said Act: Be it therefore enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. Section thirty-three of the said Act, and such part of Section 33 and section twenty-eight of the said Act as directs that in case of recited Act reference is made to drawings in any specification deposited repealed. or filed under the said Act an extra copy of such drawings should be left with such specification, shall be repealed.

2. The Commissioners shall cause true copies of all pro- Copies of provivisional specifications left at the office of the Commissioners tions to be open to be open to the inspection of the public, at such times, after to inspection at the date of the record thereof respectively, as the Commis- em office. sioners shall by their order from time to time direct.1

¹ The public is not allowed to have access to provisional specifications until the term of provisional protection has expired. An application for an inspection of a provisional specification on the ground that

A copy of every specification, etc., under the hand of the patentee or applicant, to be left at commissioners' office.

Copies or extracts of letters patent, etc., certified and sealed, filed at commissioners' office, to be received in evidence.

3. A true copy under the hand of the patentee or applicant, or agent of the patentee or applicant, of every specification and of every complete specification, with the drawings accompanying the same, if any, shall be left at the office of the Commissioners on filing such specification or complete specification.

4. Printed or manuscript copies or extracts, certified and specification or complete specification.

4. Printed or manuscript copies or extracts, certified and sealed with the seal of the Commissioners, of letters patent, specifications, disclaimers, memoranda of alterations, and all other documents recorded and filed in the Commissioners' office, or in the office of the Court of Chancery appointed for the filing of specifications, shall be received in evidence in all proceedings relating to letters patent for inventions in all courts whatsoever within the United Kingdom of Great Britain and Ireland, the Channel Islands, and the Isle of Man, and her Majesty's Colonies and Plantations abroad, without further proof or production of the originals.

Certified printed copies of specifications, etc., under seal of commissioners, to be transmitted to the Director of Chancery in Scotland, and to the Court of Chancery in Ireland, which shall be evidence, without production of originals.

5. Certified printed copies, under the seal of the Commissioners, of all specifications and complete specifications, and facsimile printed copies of the drawings accompanying the same, if any, disclaimers, and memoranda of alterations filed or hereafter to be filed under the said Patent Law Amendment Act, shall be transmitted to the office of the Director of Chancery in Scotland and to the enrolment office of the Court of Chancery in Ireland within twenty-one days after the filing thereof respectively, and the same shall be filed in the office of Chancery in Scotland and Ireland respectively, and certified copies or extracts from such documents shall be furnished to all persons requiring the same, on payment of such fees as the Commissioners shall direct; and such copies or extracts shall be received in evidence in all Courts in Scotland and in Ireland respectively in all proceedings relating to letters patent for inventions, without further proof or production of the originals.

Lord Chancellor, in certain cases, may seal letters patent after the expiration of provisional protection.

6. Where letters patent have not been sealed during the continuance of the provisional protection on which the same is granted, provided the delay in such sealing has arisen from accident, and not from the neglect or wilful default of the applicant, it shall be lawful for the Lord Chancellor, if he

the subject-matter was the same as that for which the applicant had obtained a patent, was refused by Cranworth, L. C. (Tolson's Patent, 6 De G. M. & G. 422).—Eds.

shall think fit, to seal such letters patent at any time after the expiration of such provisional protection, whether such expiration has happened before or shall happen after the passing of this Act, and to date the sealing thereof as of any day before the expiration of such provisional protection, and also to extend the time for the filing of the specification thereon; and where the specification, in pursuance of the condition of any letters patent, has not been filed within the time limited by such letters patent, provided the delay in such filing has arisen from accident, and not from the neglect or wilful default of the patentee,1 it shall be lawful for the Lord Chancellor, if he shall think fit, to extend the time for the filing of such specification, whether the default in such filing has happened before or shall happen after the passing of this Act: Provided always, that, except in any case that may have arisen before the passing of this Act, it shall not be lawful for the Lord Chancellor to extend the time for the sealing of any letters patent, or for the filing of any specification, beyond the period of one month.

7. And whereas doubts have arisen whether the provision Removing doubts of the Patent Law Amendment Act, 1852, for the making 15 & 16 Vict. and sealing new letters patent for a further term, in pursuance c. 83, respecting the making and of her Majesty's order in council, in the cases mentioned in sealing of new section forty of the said Act, extends to the making and seal- a further term. ing of new letters patent in the manner by such Act directed where such new letters patent are granted by way of prolongation of the term of letters patent issued before the commencement of the said Act: And whereas it is expedient that such new letters patent granted by way of prolongation shall be granted according to the provisions of the said Patent Law Amendment Act: Be it declared and enacted, that where her Majesty's order of council for the sealing of new letters patent shall have been made after the commencement of the said Act, the said provision of the said Act for making and sealing in manner aforesaid of new letters patent shall extend, and shall as from the commencement of the said Act be deemed to have extended, to the making and sealing in manner aforesaid of new letters patent for a further term, as well where

¹ Proper directions for the filing of a specification were forwarded by post by a patentee to his agent in due time, but the letter did not arrive until it was too late to act on the instructions. Under these circumstances the L. C. gave leave to file the specification. (Re Harris, 25 L. T. 90.) See the L. C.'s rule of the 17th July, 1854.—Eds.

the original letters patent were made before as where such original letters patent have been issued since the commencement of the said Act.

15 & 16 Vict. c. 83 and this Act to be construed as one Act.

8. This Act, and the Patent Law Amendment Act, 1852, shall be construed together as one Act.

22 Vict. c. 13.

An Act to amend the Law concerning Patents for Inventions with respect to Inventions for Improvements in Instruments and Munitions of War.

[8th April, 1859.]

WHEREAS in some cases of inventions for improvements in instruments of munitions of war it may be important to the public service that the nature of the invention should not be published, and it is therefore expedient to amend the law concerning letters patent for inventions: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

Improvements in may be assigned by inventors to secretary of state for war.

1. Any inventor of any improvement in instruments or instruments or munitions of war, or the executors, administrators, or assigns of such inventor, may, for valuable consideration or without, assign to her Majesty's principal secretary of state for the war department, on behalf of her Majesty, all the benefit of the invention, and of all letters patent obtained or to be obtained for the same, and such secretary of state may be a party to the assignment, and such assignment shall be effectual to vest the benefit of such invention and of such letters patent in the said secretary of state for the time being, on behalf of her Majesty, at law and in equity; and the benefit of such invention and of such letters patent shall be deemed property acquired by the said secretary of state on behalf of her Majesty; and all covenants and agreements contained in such assignment for giving full effect thereto, and for keeping the invention secret, and otherwise in relation thereto, shall be valid and effectual (notwithstanding any want of valuable consideration), and may be enforced and proceeded upon by

the said secretary of state for the time being accordingly, and all actions, suits, and proceedings in relation thereto may be instituted and conducted by such secretary of state for the time being, who shall have all such rights, privileges, and prerogatives in relation thereto as by law provided in the case of actions, suits, and proceedings concerning property under his care, control, and disposition.

2. The foregoing enactment shall extend to render valid Foregoing enactand effectual, and be otherwise applicable to and in respect of ment to extend any such assignment as aforesaid made before the passing of already made. this Act, and the covenants and agreements contained in such assignment, as well as any such assignment to be made thereafter, and the covenants and agreements therein contained.

3. Where any such assignment as aforesaid has been made secretary of state to the said secretary of state he may, at any time before the for war may cerfiling of the petition for the grant of letters patent for the sioner of patents that the inveninvention, or after the filing of such petition and before pub-tion should be lication of the provisional specification (if any), if he think kept secret. it for the benefit of the public service that the particulars of the invention, and of the manner in which the same is performed, should be kept secret, certify the fact of such assignment having been so made, and his opinion to the effect aforesaid, in writing under his hand to the commissioners of patents for inventions.

4. Where the said secretary of state certifies as aforesaid Where the secrethe petition for letters patent for the invention, the declaration accompanying such petition, and the provisional specification for cation or complete specification (as the case may be) filed or etc., to be left with the clerk of left therewith, and any specification to be filed in pursuance the patents in a of the condition of any letters patent for such invention, and packet under seal of secretary of all disclaimers and memoranda of alterations to be filed in state. relation to such letters patent, and any drawings accompanying any of the documents aforesaid, and any copies of any such documents or drawings, or, where the said secretary of state so certifies after the said petition has been filed, such of the said documents and drawings as may be filed after his so certifying, and the copies thereof shall, in lieu of being filed or left in the ordinary manner in the office of the commissioners, or in the office appointed for that purpose under "The Patent Law Amendment Act, 1852," be delivered to the clerk of the patents in a packet sealed with the seal of the said secretary of state.

Such packet to be kept so sealed or under the seal of the commissioners.

5. Such packet shall at all times after the delivery thereof to the clerk of the patents, until the expiration of the term or any extended term for which letters patent for the invention may be granted, be kept by him sealed up as aforesaid, or under the seal of the commissioners, save when it may be necessary to have access to the documents therein contained, or any of them, for the purpose of recording and endorsing the day of the filing thereof, or for the purpose of any reference to one of the law officers, either in relation to the same or any other invention; but in any such case as aforesaid the clerk of the patents shall not part with the care or custody of the said packet, or any of the said documents, save as may be required by one of the law officers for the purposes of any such reference, and shall use such precautions as may be necessary to prevent the contents or particulars of any such documents being improperly disclosed.

Such sealed packet to be de-livered, on demand, to secre tary of state, or by order of lord chancellor.

6. Such sealed packet shall be delivered at any time during the continuance of any such letters patent to the said secretary of state, or to any person having authority to receive the same on his behalf, on demand in writing under the hand of the said secretary of state, or to such person as the Lord Chancellor may order, and shall, if and when the same is returned to the commissioners, be again sealed up and kept under seal as aforesaid.

At the expiration of letters patent sealed packet to be delivered to secretary of state

7. Such sealed packet as aforesaid shall, at the end of the term or extended term for which any letters patent for the invention to which the documents in such packet relate, be delivered up to the said secretary of state or to any person having authority to receive the same on his behalf.

Where secretary of state certifles after filing of pealready filed to be put into a scaled packet.

8. Where the said secretary of state certifies as aforesaid after the filing of the petition, and before the publication of tition, documents the provisional specification (if any), such petition, and the declaration accompanying such petition, and the provisional specification and drawings relating to the invention which may have been filed or left in any such office as aforesaid, and all copies thereof in any such office, shall be forthwith placed in a packet sealed with the seal of the commissioners; and every such packet shall be subject to all the provisions of this Act concerning any sealed packet delivered to the clerk of the patents.

Copy of specification, etc., not

9. No copy of any specification, or other document or drawing by this Act required to be kept under seal, shall be

transmitted to Scotland or Ireland, or be printed, published, to be sent to or sold, or be open to the inspection of the public; but, save and or Ireland, or publishas in this Act otherwise directed the provisions of the Patent ed, but otherwise Law Amendment Act, 1852, and any Act amending the Patent Acts to same, shall extend and be applicable to and in respect of apply. every such specification and other document and drawing as aforesaid, and the letters patent and invention to which the same relates, and this Act and the Patent Law Amendment Act, 1852, shall be construed together as one Act.

10. It shall not be lawful for any person to take proceed- No scire facias to ings by scire facias or otherwise to repeal any letters patent be brought. for any invention in relation to which the said secretary of state has certified as aforesaid.

11. The secretary of state may, at any time by writing secretary of under his hand, waive the benefit of this Act with respect to state may waive the benefit of this any particular invention, and the documents and matters re- any invention. lating thereto shall be thenceforth kept and dealt with in the ordinary way.

12. The communication of any invention for any improve- Communication ment in instruments or munitions of war to the said secretary secretary of of state, or to any person or persons authorized by him to state, etc., not to prejudice letters investigate the same or the merits thereof, shall not, nor shall patent. anything done for the purposes of the investigation, be deemed use or publication of such invention so as to prejudice the grant or validity of any letters patent for the same.

13. In the construction of this Act "Her Majesty's Prin-Construction of cipal Secretary of State for the War Department" shall state. mean her Majesty's principal secretary of state for the time being to whom her Majesty shall think fit to intrust the seals of the war department.

RULES AND REGULATIONS

Made by the Commissioners of Patents for Inventions, and by the Lord Chancellor and the Master of the Rolls, under the Acts 15 & 16 Vict. cap. 83, and 16 & 17 Vict. cap. 115.

FIRST SET OF RULES AND REGULATIONS UNDER THE ACT 15 & 16
VICT. CAP. 83, FOR THE PASSING OF LETTERS PATENT FOR INVENTIONS.

By the Right Honourable Edward Burtenshaw Lord St. Leonards, Lord High Chancellor of Great Britain, the Right Honourable Sir John Romilly, Master of the Rolls, Sir Frederic Thesiger, her Majesty's Attorney-General, and Sir FitzRoy Kelly, her Majesty's Solicitor-General, being four of the Commissioners of Patents for Inventions under the said Act.

WHEREAS a commodious office is forthwith intended to be provided by the Crown as the Great Seal Patent Office; and the Commissioners of her Majesty's Treasury have, under the powers of the said Act, appointed such office as the office also for the purpose of the said Act:

- 1. All petitions for the grant of letters patent, and all declarations and provisional specifications, shall be left at the said commissioners' office, and shall be respectively written upon sheets of paper of twelve inches in length by eight inches and a half in breadth, leaving a margin of one inch and a half on each side of each page, in order that they may be bound in the books to be kept in the said office.
- 2. The drawings accompanying provisional specifications shall be made upon a sheet or sheets of parchment, drawing paper, or cloth, each of the size of twelve inches in length by eight inches and a half in breadth, or of the size of twelve inches in breadth by seventeen inches in length, leaving a margin of one inch on every side of each sheet.

- 3. Every provisional protection of an invention allowed by the law officer shall be forthwith advertised in the *London Gazette*, and the advertisement shall set forth the name and address of the petitioner, the title of his invention, and the date of the application.
- 4. Every invention protected by reason of the deposit of a complete specification shall be forthwith advertised in the London Gazette, and the advertisement shall set forth the name and address of the petitioner, the title of the invention, the date of the application, and that a complete specification has been deposited.
- 5. Where a petitioner applying for letters patent after provisional protection, or after deposit of a complete specification, shall give notice in writing at the office of the commissioners of his intention to proceed with his application for letters patent, the same shall forthwith be advertised in the *London Gazette*, and the advertisement shall set forth the name and address of the petitioner and the title of his invention; and that any persons having an interest in opposing such application are to be at liberty to leave particulars in writing of their objections to the said application at the office of the commissioners within twenty-one days after the date of the *Gazette* in which such notice is issued.
- 6. The Lord Chancellor having appointed the Great Seal Patent Office to be the office of the Court of Chancery for the filing of specifications, the said Great Seal Patent Office and the office of the commissioners shall be combined; and the clerk of the patents for the time being shall be the clerk of the commissioners for the purposes of the Act.
- 7. The office shall be open to the public every day, Christmas-Day and Good-Friday excepted, from ten to four o'clock.
- The charge for office or other copies of documents in the office of the commissioners shall be at the rate of twopence for every ninety words.

(Signed)

St. Leonards, C.
John Romilly, M.R.
Fred. Thesiger, A.G.
FitzRoy Kelly, S.G.

Dated the 1st Oct., 1852.

By the Right Honourable Edward Burtenshaw Lord St. Leonards, Lord High Chancellor of Great Britain, and the Right Honourable Sir John Romilly, Master of the Rolls.

Ordered, that there shall	be paid	to	the	law	officers	and	to
their clerks the following fee	es :1						

By the person opposing	a on	rant	of	let	ters	ı nı	ate	nt.			
To the law officer									12	6	
To his clerk											
To his clerk for su	· mm	Ons	•	•	•	•	•	Ô	5	0	
By the petitioner on the										-	
To the law officer		•• •••	5 °			usc		£3	12	6	
To his clerk .										6	
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By the petitioner for the	e ne	:arı	ng,	pre	evic	us	το	tne	пат	OIL	ne
law officer allowing a)ra	nau	m or	aiter	a -
tion in letters patent								۸-		_	
To the law officer	•	•	•	•		•	•	£2	12	6	
To his clerk								0	12	6	
By the person opposing	the	all	ow	anc	e o	f s	ucl	h di	isclai	mer	or
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Dated the 1st Oct., 1	852										
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Ordered by the Right Honourable Edward Burtenshaw Lord St. Leonards, Lord High Chancellor of Great Britain.

- 1. All specifications in pursuance of the condition of letters patent, and all complete specifications accompanying petitions and declarations before grant of letters patent, shall be filed in the Great Seal Patent Office.
- 2. All specifications in pursuance of the conditions of letters patent, and all complete specifications accompanying petitions for the grant of letters patent, shall be respectively

¹ The law officers being now paid fixed salaries for their services, these fees are now payable to the Crown, and are paid at the Patent Office by impressed stamps.

written bookwise upon a sheet or sheets of parchment, each of the size of twenty-one inches and a half in length by fourteen inches and three-fourths of an inch in breadth; the same may be written upon both sides of the sheet, but a margin must be left of one inch and a half on every side of each sheet.

- 3. The drawings accompanying such specification shall be made upon a sheet or sheets of parchment, each of the size of twenty-one inches and a half in length by fourteen inches and three-fourths of an inch in breadth, or upon a sheet or sheets of parchment, each of the size of twenty-one inches and a half in breadth by twenty-nine inches and a half in length, leaving a margin of one inch and a half on every side of each sheet.
- 4. The charge for office or other copies of documents in the Great Seal Patent office shall be at the rate of twopence for every ninety words.

(Signed) St. Leonards, C.

Dated the 1st Oct., 1852.

NOTE.—It is recommended to applicants and patentees to make their elevation drawings according to the scale of one inch to a foot.

SECOND SET OF RULES AND REGULATIONS UNDER THE ACT 15 & 16
VICT. CAP. 83, FOR THE PASSING OF LETTERS PATENT FOR
INVENTIONS.

- By the Right Honourable Edward Burtenshaw Lord St.

 Leonards, Lord High Chancellor of Great Britain, the
 Right Honourable Sir John Romilly, Master of the
 Rolls, Sir Frederic Thesiger, her Majesty's AttorneyGeneral, and Sir FitzRoy Kelly, her Majesty's SolicitorGeneral, being four of the Commissioners of Patents for
 Inventions under the said Act.
- 1. The office of the Directory of Chancery in Scotland, being the office appointed by the Act for the recording of transcripts of letters patent, shall be the office of the commissioners in Edinburgh for the filing of copies of specifications, disclaimers, memoranda of alterations, provisional specifications, and certified duplicates of the register of proprietors.
- 2. All such transcripts, copies, and certified duplicates shall be bound in books, and properly indexed, and shall be open to the inspection of the public at the said office, every day from ten to three o'clock.

- 3. The charge for office copies of such transcripts, copies, and certified duplicates, recorded and filed in the said office, shall be at the rate of twopence for every ninety words.
- 4. The enrolment office of the Court of Chancery in Dublin, being the office appointed by the Act for the enrolment of transcripts of letters patent, shall be the office of the commissioners in Dublin for the filing of copies of specifications, disclaimers, memoranda of alterations, provisional specifications, and certified duplicates of the register of proprietors.
- 5. All such transcripts, copies, and certified duplicates shall be bound in books, and properly indexed, and shall be open to the inspection of the public at the said enrolment office every day, Christmas-day and Good-Friday excepted, from ten to three o'clock.
- The charge for office copies of such transcripts, copies, and certified duplicates, enrolled and filed as aforesaid, shall be at the rate of twopence for every ninety words.
- 7. No warrant is to be granted for the sealing of any letters patent which contains two or more distinct substantive inventions.¹
- 8. A provision is to be inserted in all letters patent in respect whereof a provisional and not a complete specification shall be left on the application for the same, requiring the specification to be filed within six months from the date of the application.
- 9. No amendment or alteration, at the instance of the applicant, will be allowed in a provisional specification after the same has been recorded, except for the correction of clerical errors or of omissions made per incuriam.
- 10. The provisional specification must state distinctly and intelligibly the whole nature of the invention, so that the law officer may be apprised of the improvement, and of the means by which it is to be carried into effect.

(Signed) St. Leonards, C.
John Romilly, M.R.
Fred. Thesiger, A.G.

FITZROY KELLY, S.G.

Dated the 15th Oct., 1852.

¹ This rule was rescinded by the Third Set of Rules of 12th December, 1853.— Eds.

Ordered by the Right Honourable Edward Burtenshaw, Lord St. Leonards, Lord High Chancellor of Great Britain.

Every application to the Lord Chancellor against or in relation to the sealing of letters patent shall be by notice, and such notice shall be left at the Commissioners' office, and shall contain particulars in writing of the objections to the sealing of such letters patent.

(Signed)

ST. LEONARDS, C.

Dated the 15th Oct., 1852.

THIRD SET OF RULES AND REGULATIONS UNDER THE ACT 15 & 16 VICT. CAP. 83, FOR THE PASSING OF LETTERS PATENT FOR INVENTIONS, AND UNDER THE ACT OF THE 16 & 17 VICT. CAP. 115.

By the Right Honourable Robert Monsey Lord Cranworth, Lord High Chancellor of Great Britian, the Right Honourable Sir John Romilly, Master of the Rolls, Sir Alexander James Edmund Cockburn, her Majesty's Attorney-General, and Sir Richard Bethell, her Majesty's Solicitor-General, being four of the Commissioners of Patents for Inventions under the said Act of the 15 & 16 Vict. cap. 83.

It is ordered as follows:-

Rule 7 of the Second Set of Rules and Regulations of the Commissioners, dated the 15th October, 1852, is hereby rescinded

- 1. Every application for letters patent, and every title of invention and provisional specification, must be limited to one invention only, and no provisional protection will be allowed or warrant granted where the title or the provisional specification embraces more than one invention.
- 2. The title of the invention must point out distinctly and specifically the nature and object of the invention.
- 3. The copy of the specification, or complete specification, directed by the Act 16 & 17 Vict. cap. 115, sect. 3, to be left at the office of the Commissioners on filing the specification or complete specification shall be written upon sheets of brief or foolscap paper, briefwise, and upon one side only of each sheet. The extra copy of drawings, if any, left with the same, must be made as heretofore, and according to the directions contained in Rule III. of the Lord Chancellor, dated the 1st October,

1852. [Altered by Rule II. of the Rules of 17th May, 1876.]

- 4. The copy of the provisional specification to be left at the office of the Commissioners on depositing the same shall be written upon sheets of brief or foolscap paper, briefwise, and upon one side only of each sheet. The extra copy of drawings, if any, left with the same, must be made as heretofore, and according to the directions contained in Rule II. of the Commissioners, dated the 1st October, 1852. [Altered by Rule III. of the Rules of 17th May, 1876.]
- 5. All specifications, copies of specifications, provisional specifications, petitions, notices, and other documents, left at the office of the Commissioners, and the signatures of the petitioners or agents thereto, must be written in a large and legible hand.
- 6. In the case of all petitions for letters patent left at the office of the Commissioners after the 31st day of December, 1853, the notice of the applicant of his intention to proceed for letters patent for his invention shall be left at the office of the Commissioners eight weeks at the least before the expiration of the term of provisional protection thereon, and no notice to proceed shall be received unless the same shall have been left in the office eight weeks at the least before the expiration of such provisional protection; and the application for the warrant of the law officer and for the letters patent must be made at the office of the Commissioners twelve clear days at the least before the expiration of the term of provisional protection, and no warrant or letters patent shall be prepared unless such application shall have been made twelve clear days at the least before the expiration of such provisional protection: Provided always, that the Lord Chancellor may, in either of the above cases, upon special circumstances, allow a further extension of time, on being satisfied that the same has become necessary by accident, and not from neglect or wilful default of the applicant or his agent. [Altered by Rule of the 14th May, 1878.]

(Signed) CRANWORTH, C.
JOHN ROMILLY, M.R.
A. E. COCKBURN, A.G.
RICHARD BETHELL, S.G.

Dated the 12th of Dec., 1853.

¹ See In re Hersee & Smyth, L. R. 1 Ch. 518.

RULE IN RESPECT OF APPLICATION TO THE LORD CHANCELLOR TO EXTEND THE TIME FOR SEALING LETTERS PATENT.

By the Right Honourable Robert Monsey Lord Cranworth, Lord High Chancellor of Great Britain.

Whereas by the Act 16 & 17 Vict. cap. 115, the Lord Chancellor is empowered to extend the time for the sealing of letters patent for an invention, and for the filing of the specification thereon, limited to the period of one month after the expiration of the six months of provisional protection of such invention, provided the delay in sealing such letters patent and in filing such specification has arisen from accident, and not from the neglect or wilful default of the applicant.

It is ordered as follows:-

Every petition addressed to the Lord Chancellor, praying for the extension of time for the sealing of letters patent, and for the filing of the specification thereon, under the provisions of the Act of the 16 & 17 Vict. cap. 115, and the affidavit accompanying the same, shall be left at the office of the Commissioners of Patents. And in every case where the delay in sealing such letters patent and in filing such specification is alleged to have been caused by adjourned hearings of objections to the grant of such letters patent before the law officer to whom such objections may have been referred, the petitioner, before leaving his petition as aforesaid, shall obtain the certificate of such law officer, to the effect that the allegations in respect of such adjourned hearings and causes of delay are in the opinion of such law officer correct, and that the delay arising from such adjourned hearings has not been occasioned by the neglect or default of the petitioner. And such certificate shall be written at the foot of or shall be annexed to such petition.

(Signed) CRANWORTH, C. Dated this 17th day of July, 1854.

Rule as to Inventions Communicated from Abroad.

I. In any application for a patent which is stated to be a communication, the declaration must state the name and address of the party from whom it has been received in the following manner:—

No. 1. When declaration is made in the United Kingdom

—"That it has been communicated to me from abroad by (here insert name and address in full)."

No. 2. In other cases—"That it is a communication from (A.B.) a person resident at (here insert address in full)."

II. All provisional specifications must be written on one side only of each sheet.

FITZROY KELLY. H. M. CAIRNS.

Dated 23rd Feb., 1859.

RULE AS TO PAYMENT OF CERTAIN STAMP DUTIES.

It is ordered as follows:-

That on and after the 1st of July, 1867, no stamp duties payable upon notices to proceed, notices of objection, or warrants and letters patent shall be received in the office of the Commissioners after two o'clock in the afternoon of Saturdays, nor after three o'clock on other days: Except that on the last day for the payment of any of such stamp duties they shall be received up to four o'clock.

(Signed)

CHELMSFORD, C.
ROMILLY, M.R.
JOHN ROLT.
JOHN B. KARSLAKE.

Dated the 14th of May, 1867.

RULE ALTERING A RULE OF THE 1ST OCTOBER, 1852.

It is ordered as follows:---

Rule II. of the first set of rules and regulations of the Commissioners, dated the 1st October, 1852, to be altered by the addition of the word "drawing" before the word "paper" in the second line of the printed copy.

(Signed)

HATHERLEY, C.
ROMILLY, M.R.
R. P. COLLIER, A.G.
J. D. COLERIDGE, S.G.

Dated the 1st day of July, 1871.

Rules rescinding and altering frevious Rules.

It is ordered as follows:--

- I. The rule of the Commissioners, dated the 17th December, 1866, requiring every applicant for Letters Patent to deliver with his provisional or complete specification an abridgment of such provisional or complete specification, shall not remain in force after the 30th day of June, 1876.
- II. The latter part of Rule III. of the Third Set of Rules and Regulations of the Commissioners, dated the 12th December, 1853 (viz. "The extra copy of Drawings, if any, left "with the same, must be made as heretofore, and according "to the directions contained in Rule III. of the Lord Chan-"cellor, dated the 1st October 1852"), shall not remain in force after the 30th day of June, 1876. From that date the following shall be substituted therefor:—

The exact copy of drawings left with the same must be made on good white smooth-surfaced drawing paper of the same dimensions as the parchment drawing. All the lines of the drawing must be absolutely black, Indian ink of the best quality to be used, and the same strength or colour of the ink maintained throughout the drawing. Any shading must be in lines, clearly and distinctly drawn, and as open as is consistent with the required effect. Section lines should not be too closely drawn. No colour must be used for any purpose upon this drawing. All letters and figures of reference must be bold and distinct. The border line of the drawing to be This drawing must not be folded, but one fine line only. must be delivered at the Office of the Commissioners either in a perfectly flat state or rolled upon a roller, so as to be free from creases or breaks.

In all cases where the original drawing on parchment is coloured, there must be left, in addition to the above copy, another copy coloured.

III. The latter part of Rule IV. of the Third Set of Rules and Regulations of the Commissioners, dated the 12th December, 1853 (viz. "The extra copy of drawings, if any, left with "the same, must be made as heretofore, and according to the "directions contained in Rule II, of the Commissioners, dated "the 1st October, 1852"), shall not remain in force after the 30th day of June, 1876. From that date the following shall be substituted therefor:—

The extra copy of drawings left with the same must be made on good white smooth-surfaced drawing paper of the same dimensions as the original drawing. All the lines of the drawing must be absolutely black, Indian ink of the best quality to be used, and the same strength or colour of the ink maintained throughout the drawing. Any shading must be in lines, clearly and distinctly drawn, and as open as is consistent with the required effect. Section lines should not be too closely drawn. No colour must be used for any purpose upon this drawing. All letters and figures of reference must be bold and distinct. The border line of the drawing to be This drawing must not be folded, but one fine line only. must be delivered at the Office of the Commissioners either in a perfectly flat state or rolled upon a roller, so as to be free from creases or breaks.

In all cases where the original drawing is coloured, there must be left, in addition to the above copy, another copy coloured.

(Signed) CAIRNS, C.
G. JESSEL, M.R.
JOHN HOLKER, Attorney-General.
HARDINGE S. GIFFARD, Solicitor-General.
Dated the 17th day of May, 1876.

It is ordered as follows:—

That the following Rule shall be substituted for Rule VI. of the Third Set of Rules and Regulations of the Commissioners, dated the 12th December, 1853.

VI. In the case of all petitions for Letters Patent left at the Office of the Commissioners after the 30th June, 1878, the notice of the applicant of his intention to proceed for Letters Patent must be left at the Office of the Commissioners within four calendar months from and after the date of application; and the application for the warrant of the Law Officer and for the Letters Patent must be made at the Office of the Commissioners twenty-one days at the least before the expiration of six calendar months from and after the date of application: Provided always, that when the last day for giving such notice or making such application falls on Sunday, Good Friday, or Christmas Day, such notice may be given or application made on the following day: Provided also, that

the Lord Chancellor may in either of the above cases, upon special circumstances, allow a further extension of time on being satisfied that the same has become necessary by accident, and not from the neglect or wilful default of the applicant or his agent.

(Signed) Cairns, C.
G. Jessel, M.R.
John Holker, A.G.
Hardinge S. Giffard, S.G.

Dated the 14th day of May, 1878.

NOTICE UNDER "THE PUBLIC OFFICES FEES ACT, 1866."

FEES PAYABLE TO THE CROWN WITH RESPECT TO THE SERVICES OF THE LAW OFFICERS IN CONNECTION WITH PATENT HEARINGS.

WE being two of the Lords Commissioners of Her Majesty's Treasury, do, in pursuance of the said Act, and with the concurrence of the Law Officers of the Crown, hereby declare and direct that, from and after the 1st July, 1878, the fees payable to the Exchequer upon the hearings of Patent oppositions and for Disclaimers shall be collected by means of stamps, and that the said fees shall be paid at the office of the Clerk to the Commissioners of Patents for Inventions, instead of, as heretofore, at the offices of the Attorney and Solicitor-General; and, in pursuance of the third section of the abovenamed Act, we further direct that impressed stamps alone shall be used.

J. D. ELPHINSTONE. Row. WINN.

PRIVY COUNCIL.

RULES IN PATENT CASES BEFORE THE JUDICIAL COMMITTEE.

Rules to be observed in Proceedings before the Judicial Committee of the Privy Council under the Act of the 5th & 6th Wm. IV. intituled "An Act to amend the Law touching Letters Patent for Inventions" (cap. 83).

Rule I.—A party intending to apply by petition, under section 2 of the said Act, shall give public notice by advertising in the "London Gazette" three times, and in three London papers, and three times in some country paper published in the town where or near to which he carries on any manufacture of anything made according to his specification, or near to or in which he resides, in case he carries on no such manufacture, or published in the county where he carries on such manufacture, or where he lives, in case there shall not be any paper published in such town, that he intends to petition his Majesty under the said section, and shall in such advertisements state the object of such petition, and give notice of the day on which he intends to apply for a time to be fixed for hearing the matter of his petition (which day shall not be less than four weeks from the date of the publication of the last of the advertisements to be inserted in the "London Gazette"), and that on or before such day, notice must be given of any opposition intended to be made to the petition; and any person intending to oppose the said application shall lodge notice to that effect at the Council Office, on or before such day so named in the said advertisements, and having lodged such notice, shall be entitled to have from the petitioner four weeks' notice of the time appointed for the hearing.

Rule II.—A party intending to apply by petition, under section 4 of the said Act, shall, in the advertisements directed to be published by the said section, give notice of the day on which he intends to apply for a time to be fixed for hearing the matter of his petition (which day shall not be less than four weeks from the date of the publication of the last of the

advertisements to be inserted in the "London Gazette"), and that on or before such day caveats must be entered; and any person intending to enter a caveat shall enter the same at the Council Office, on or before such day so named in the said advertisements; and having entered such caveat, shall be entitled to have from the petitioner four weeks' notice of the time appointed for the hearing.

Rule III.—Petitions under sections 2 and 4 of the said Act must be presented within one week from the insertion of the last of the advertisements required to be published in the "London Gazette."

Rule IV.—All petitions must be accompanied with affidavits of advertisements having been inserted according to the provisions of section 4 of the said Act, and the 1st and 2nd of these Rules, and the matters in such affidavits may be disputed by the parties opposing upon the hearing of the petitions.

Rule V.—All persons entering caveats under section 4 of the said Act, and all parties to any former suit or action touching letters patent, in respect of which petitions shall have been presented under section 2 of the said Act, and all persons lodging notices of opposition under the 1st of these Rules, shall respectively be entitled to be served with copies of petitions presented under the said sections, and no application to fix a time for hearing shall be made without affidavit of such service.

Rule VI.—All parties served with petitions shall lodge at the Council Office, within a fortnight after such service, notice of the grounds of their objections to the granting of the prayers of such petitions.

Rule VII.—Parties may have copies of all papers lodged in respect of any application under the said Act, at their own expense.

Rule VIII.—The Registrar of the Privy Council, or other officer to whom it may be referred to tax the costs incurred in the matter of any petition presented under the said Act, shall allow or disallow, in his discretion, all payments made to persons of science or skill examined as witnesses to matters of opinion chiefly.

Rule IX.—A party applying for an extension of a patent, under section 4 of the said Act, must lodge at the Council Office six printed copies of the specification, and also four

copies of the balance-sheet of expenditure and receipts relating to the patent in question, which accounts are to be proved on oath before the Lords of the Committee at the hearing. In the event of the applicant's specification not having been printed, and if the expense of making six copies of any drawing therein contained or referred to would be considerable, the lodging of two copies only of such specification and drawing will be deemed sufficient.

All copies mentioned in this Rule must be lodged not less than one week before the day fixed for hearing the application.

The Judicial Committee will hear the Attorney-General, or other Counsel, on behalf of the Crown, against granting any application made under either the 2nd or 4th section of the said Act, in case it shall be thought fit to oppose the same on such behalf.

APPENDIX.

PART II.

PATENT LAWS OF FOREIGN COUNTRIES:

AMERICA, U.S. OF.
ARGENTINE REPUBLIC.
AUSTRIA.
BELGIUM.
BRAZIL.
CHILI.
COLOMBIA.
DENMARK.
FRANCE.
GERMANY.
GUATEMALA.
HOLLAND.

ITALY.
JAPAN.
MEXICO.
NICARAGUA.
NORWAY.
PORTUGAL.
RUSSIA AND FINLAND.
SAN SALVADOR.
SPAIN.
SWEDEN.
SWITZERLAND.
VENEZUELA.

PATENT LAWS OF BRITISH COLONIES:

AUSTRALIAN COLONIES.

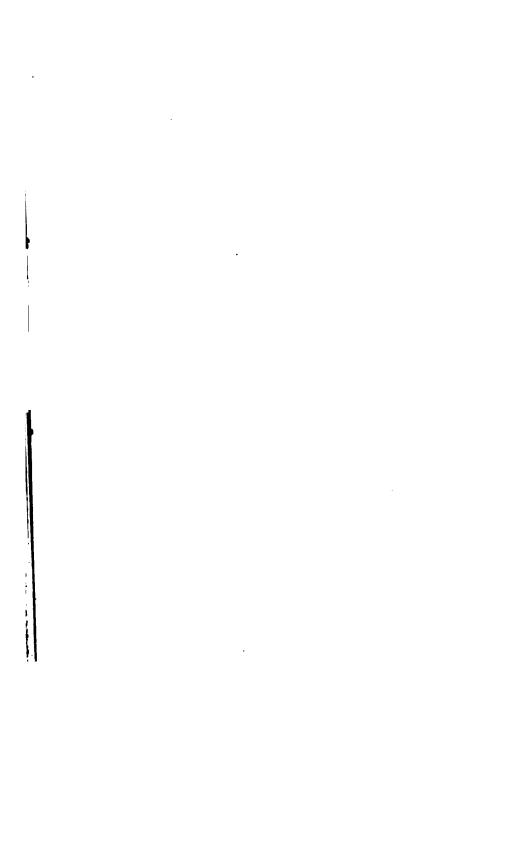
NEW SOUTH WALES. NEW ZEALAND. QUEENSLAND. SOUTH AUSTRALIA. TASMANIA.

VICTORIA.

WESTERN AUSTRALIA.

TRINIDAD.

BRITISH GUIANA. BRITISH HONDURAS. CANADA. CAPE OF GOOD HOPE. CEYLON. INDIA. JAMAICA.
LEEWARD ISLANDS.
MAURITIUS.
NATAL.
NEWFOUNDLAND.
STRAITS SETTLEMENTS.



APPENDIX.

PART II.

FOREIGN PATENTS.

THE field for enterprise in this respect is so large, that it behoves the inventor, who is not satisfied with the protection afforded him at home, to consider well the countries in which his invention is likely to come into use, and also his own personal prospects of pushing his invention abroad.

It is well known that a very large sum of money is annually spent upon foreign patents without the slightest return; and this arises, not so much from the fact that the inventions patented abroad are not of value or suited to the requirements of the countries in which they are patented, but that the inventors having once obtained patents, do not attend to the requirements of the several States as to the acts to be done and duties paid, and do not take the slightest trouble to obtain a commercial introduction of their inventions, but seem to think, contrary to general experience, that nothing more than the possession of the patent is requisite for the purpose of obtaining a return for the invention.

There are many rules with respect to foreign patents which differ from our British regulations: for instance, it is nearly universally necessary that the inventor should himself apply for the patent, and that the inventions patented should be put into practice within a certain definite period from the grant, and should continue in use year by

year during the term. Annual and other duties have to be paid, and in some States the patented articles must be made in the country itself, and cannot be imported. It should also be borne in mind that any publication at home is a bar to obtaining a patent afterwards in many foreign states, and in many foreign countries the patent for an imported invention expires with the determination of the grant in that country from which the invention has been imported.

Although the laws of the various South American republics are given patents are difficult to obtain in these States, and their cost is very uncertain, as the grants frequently depend upon the goodwill of officials whose favour has to be purchased.

AMERICA, UNITED STATES OF.

The existing law of patents in the United States is principally regulated by the Act of Congress of July, 1870, and in the revised Statute approved June, 1874. There is now no difference in the fees paid by citizens and foreigners.

Probably in no country in the world are the rights of inventors more cherished than in the United States: the number of inventions, particularly of the class termed "labour-saving," protected annually by patents, is immense; and at the same time, the number of British patents applied for by citizens of the United States is proportionately large.

The facilities for obtaining patents have been increased of late years, and no patent for an invention possessing any features of novelty is refused.

The following particulars will be found, we believe, to give all the information an inventor can require as to the patent laws of the United States:—

All inventors, whether native or foreign, or their legal assignees, may obtain patents. An original inventor may obtain a patent at any time, provided his invention has not been in public and common use in the United States

for more than two years prior to his application; and has not been previously patented or described in any foreign publication. Beyond this period he can still obtain a patent, provided his invention has not been introduced into the States, although it may have been published.

Only an American inventor, or a foreigner who has resided for one year in the United States, and has declared on oath his intention of becoming a naturalized citizen of the States, can deposit a caveat.

New and useful arts, new machines, new chemical compounds, useful implements unknown or not used by others prior to the date of the demand are patentable. A new application of a known mechanism or process cannot be patented. All patented articles must bear the date of the patent. Any patentee who, by mistake, shall have claimed some parts, the novelty of which cannot be supported, may, by means of a disclaimer, abandon such parts, but no addition to the patent can be made: the improvements on an invention can only be secured by a new patent, although any new parts which appeared in the original specification, but which were not claimed, may be secured by surrendering the patent and obtaining a reissue.

Patents are granted for seventeen years. Patents for inventions previously patented abroad expire with the foreign patent.

On the application for a patent a tax of 15 dollars is to be paid, and on the delivery of the patent the further tax of 20 dollars.

The tax on entry of a disclaimer is 30 dollars.

No prolongations are granted.

Applications for patents are submitted to the examination of special commissioners, who reject all those which are irregular, and those which claim more than is new. Demands so rejected may be again presented after having been modified. In the case of a fresh rejection by the first examiners, the petitioner may appeal to the chief examiners, and in case of their rejection he may appeal to the Commissioner of Patents. These proceedings create delay, and involve considerable expense.

The patents are afterwards published in full by the Government, and may be inspected by the public, who may also obtain copies on a small payment.

The petition to the Patent Commissioners must be accompanied by a receipt for the tax, a description or specification setting forth clearly the nature and principle of the invention, drawings in duplicate, a model of a size not exceeding one foot in length, breadth, and height, or a specimen of the product, and a power of attorney legalized by the Consul.

Patents become void: 1. If the invention has been publicly used before the application (the personal use of a machine, process, &c., by another within the two years only preceding the patent, does not nullify the same, but the continued use by such person cannot be prevented).

2. When it has been obtained to the damage of the true inventor.

3. If the specification filed does not truly set forth the invention, and if it claims part not new.

ARGENTINE REPUBLIC.

The Republic has established a Patent Office on the model of that of the United States.

Patents are granted for terms of five, ten, or fifteen years for all new and useful inventions and discoveries excepting pharmaceutical compositions, providing that such inventions or discoveries have not been previously published.

The Government fees on a patent are 80, 200, or 350 piastres (pesos fuertes) according to its term (in addition to sundry petty stamp duties), one half of which amount has to be paid at the time of the application, and the remainder by yearly payments for which the inventor must give a guarantee.

Certificates of addition or improvement are also granted both to the original patentee and to others. In the former case one-fourth of the fees required for an original patent have to be paid, and in the latter case one half of said fees.

Provisional Patents are also granted for one year, the payment for which is 50 piastres. These patents are renewable at the expiration of each year.

Applications for patents are to refer to a single chief object with its accessories and applications. Patents may be assigned. A patent is invalid if the drawing or specification is incorrect or incomplete. It also becomes void if not worked within two years from the date of issue, or if the working has been interrupted for a similar period except by circumstances beyond control or accident. In either case no special judicial decree is required to render the patent null and void.

Proceedings may be taken for infringement.

AUSTRIA.

The patent law of this empire was remodelled by an imperial decree, dated the 15th August, 1852, which established the following regulations throughout the empire:—

Patents are not allowed for alimentary preparations, beverages, or medicines, nor for discoveries, inventions, or improvements which are contrary to public health, public welfare, morality, or the interest of the State. Scientific principles or purely scientific theories cannot be patented. With these exceptions, patents are granted for every new discovery, invention, or improvement, having for its object (a) a new industrial product, (b) a new means of producing, or (c) a new method of producing—that is to say, new within the empire.

An invention is deemed new when, up to the moment the patent was applied for, the same had not been put into operation, or been made public in the empire.

Foreigners, as well as Austrian subjects, may be patentees; but with regard to inventions made by foreigners not resident in Austria, patents are only granted when a patent has been obtained in a foreign country for the same object, and then only to the original patentee, or his legal assignee, during the term of his foreign patent. The foreign letters patent, or an authenticated copy, must be deposited at the Patent Office for registration.

Two or more inventions cannot be included in a single patent, unless they refer to the same subject-matter, as essential parts of it.

The petition for a patent may be made either by the inventor, or by his legal attorney. It must state the exact

title of the invention, and the number of years for which it is desired the patent should last. The maximum duration of a patent is fifteen years, which length of time cannot be exceeded, except by special imperial authority.

The amount of Government tax is as follows:—For the first five years, 26 florins a-year; sixth year, 40 florins; seventh year, 46 florins; eighth year, 53 florins; ninth year, 60 florins; tenth year, 66 florins; eleventh year, 79 florins; twelfth year, 92 florins; thirteenth year, 105 florins; four-teenth year, 119 florins; fifteenth year, 132 florins; or for the entire fifteen years 918 florins (£92). In addition to these taxes there are also others in the nature of town dues, stamps upon petitions, &c., payable upon patents. Previous to, or at the time of lodging the petition, the tax must be paid for the entire number of years for which the patent is applied for.

A description must accompany the petition, and this must contain a full, clear, and minute explanation of the invention, so as to enable all competent persons to manufacture the article according to that specification; if drawings, samples, or models are required for the full comprehension of the description, they must be supplied.

A patentee is entitled to establish workshops or factories, to employ the workpeople he may find requisite to carry out the object of the patent to its fullest extent, and consequently to form establishments, stores, and warehouses for the manufacture, within the entire empire. He may sell and dispose of the proceeds, and license others to use his invention, take partners, and dispose of his patent right by assignment or in any way whatsoever.

When the original term of a patent is less than fifteen years, the patentee may apply to have it prolonged for one or more years within the full period of fifteen years. He must make application before the term originally limited has expired, pay the entire tax for the term of prolongation, and deposit the original letters patent and the receipt of the corresponding paid annuities of his foreign patent if the applicant is a foreigner.

A patent will be cancelled on proof that the legal requisites for a patent do not exist, or that the description does not fulfil the prescribed conditions, or that the invention is not new, or being an importation from abroad, that

the patentee is not the real owner of the foreign patent, or that the object of the patent is contrary to law, or to the health or morality of the public, or the interest of the State.

A patent will expire not only by efflux of the term, but also in case the patentee has not begun to work his invention in the empire with inland materials, within a year from the date of the patent, or in case he should entirely suspend working the same for the space of two years. Patents are invalidated if it is proved (a) that the description of the patent is insufficient, (b) that the patented invention, before the date of the official certificate, was not novel in the empire, or that the invention had been imported and that the Austrian patent has not been granted to the original proprietor of the foreign patent, (c) if the proprietor of a valid patent proves that the invention patented at a later period is identical with his own discovery or invention previously patented.

BELGIUM.

An Act bearing date the 24th May, 1854, and a royal decree of the same date, and an amending law of the 27th March, 1857, determine the law of patents in this kingdom.

Patents are granted without previous examination, at the sole risk of the applicants.

The duration of patents is fixed at twenty years, except in the case of inventions previously patented in some other country. Such patents will expire at the same time as the foreign patent.

Patents are subject to an annual and progressive tax, viz.:—first year, 10 frs. (8s.); second year, 20 frs. (16s.); third year, 30 frs. (24s.); and so on till the twentieth year, when the tax will be 200 frs. (£8). Each annual tax is to be paid in advance.

No tax is payable on patents for improvement when delivered to the original patentee; such patents expire with the original patent. Patents confer on their owners or assigns the exclusive right of working the invention for themselves, or having it worked by persons authorized by them.

Applicants for patents are required to lodge at the proper office, in duplicate, a full description of the invention, with drawings, models, or samples, when necessary. The first annual tax is paid when the documents are lodged.

Specifications of patents are published three months after the grant. The annual tax can be paid within one month after the date when it is due without fine, and can be paid within five months after the expiration of the one month, on payment of 10 francs besides the annual tax.

The owner of a patent must work the invention in Belgium within one year from its having been worked abroad; otherwise it becomes void, and this will be the case if a suspension of the working of the invention for one year takes place, unless good reason can be given.

Patents will become void if the invention is destitute of novelty, either by reason of having been previously worked in Belgium or of having been published in a printed work; if the specification is not full and complete; also in case the invention has been previously patented in Belgium or abroad, the patentee not being the proprietor of the foreign patent.

BRAZIL.

Natives or foreigners can obtain patents without distinction.

All inventions or improvements are patentable.

The duration of a patent is fixed by the Government, and varies from five to twenty years.

Government grants privileges to persons who introduce new industries. These privileges, however, depend upon the Legislative Power for their confirmation.

An invention already having the protection of a foreign patent can only be protected in Brazil by an exclusive privilege for its introduction into the country. These priviCHILI. 361

leges are granted for the unexpired term of the foreign patent, but are renewable at the will of the Government.

There is no Government tax, but the granting of a patent or privilege necessitates the payment of certain stamp duties and official expenses.

The fees are payable in advance.

The effects of a patent of invention cease, if it be proved that the applicant was untruthful, or concealed any essential fact in the specification made to obtain it, or if an invention has been printed and described like the one which the pretended inventor alleged to be his.

And also:-

If the guarantee does not within two years after the grant put in practice his invention.

If the inventor has obtained in a foreign country a patent for the same invention.

If the object manufactured be prejudicial to the public or contrary to the law.

If the inventor employed his invention before obtaining a patent.

The application for patent or privilege must be accompanied by a set of drawings and description.

CHILI.

Article 152 of the Chilian Constitution, dated May, 1833, accords to every author or inventor the exclusive proprietorship of his discovery or invention for a limited period to be fixed by law.

The conditions under which such privileges are granted, and the duration of the same, are regulated by a law passed in 1840, supplemented by other laws decreed and promulgated in August, 1851, and on August 16th, 1856.

The inventor of a new invention or discovery may submit the same to the Home Minister, who will refer the application to Commissioners for examination, and if their report be favourable, the Minister will grant a patent.

The term of a patent cannot exceed ten years. The patentee has to pay a sum of £10 into the Treasury. The

specification, &c., is kept secret until the expiration of the term.

Patents are also granted under similar conditions for the introduction into Chili of foreign arts and industries, but in this case the term does not exceed eight years.

Patents may be extended when the importance of the invention justifies it, but application must be made therefor six months before the expiration of the first term.

A period exclusive of the term of the patent is allowed for the erection of machinery, &c., for working the patent, but should the inventor fail to carry out the same within that period, or discontinue the working for more than a year, or produce articles inferior to the original sample, the patent becomes void.

Patents may be assigned. Infringers of a patented article are liable to a fine and to the forfeiture of the article produced and the establishment and implements used in its manufacture. Any person not being the true inventor fraudulently obtaining a patent is liable to fine or imprisonment.

COLOMBIA.

The power to grant patents in Colombia is limited and defined by the law of the 13th of May, 1869.

A patent may be obtained for any invention or improvement of mechanical apparatus, combination of materials or process, and for the making and sale of any manufacture or industrial product, but not for the importation of foreign productions whether natural or manufactured.

The duration of a patent cannot exceed twenty nor be less than five years, and in the case of an invention previously patented abroad, such duration is subject to the earlier expiration of the prior foreign patent.

The inventor is required to present a petition to the executive power setting forth the nature of his invention or improvement and stating the number of years for which a patent is desired, and if the decision be favourable, he must furnish within forty days a full description of the

invention, accompanied by drawings or models if necessary. A patent will then be issued without any previous examination as to the novelty or utility of the invention.

A patent is refused when the invention endangers public salubrity or security, or encroaches upon proprietary rights already acquired, and a grant may be subsequently revoked if it is found to violate existing rights. A patent also becomes void if during a whole year the invention is not worked, unless it be from unavoidable circumstances.

A fee of from £1 to £2 for every year of the duration of the patent has to be paid in full at the time of the grant. A sum of £2 is required to be paid into the Treasury on presenting the petition, which sum is either computed as part payment or forfeited according as the patent is granted or refused.

An injunction may be obtained for infringement.

DENMARK.

Inventors, whether natives or foreigners, as well as the first importer, may obtain patents.

All inventions or improvements are patentable.

The patent dates from the day of the signature of the King to the patent.

Patents of invention and of importation are granted. Improvements can only be protected by new patents of invention.

The term of patents of invention is fixed by the Government, and cannot exceed fifteen years; that of patents of foreigners is five years.

A uniform tax of 60 francs is required for each application for a patent. If the patent be in the name of several persons, the tax is 120 francs. Over and above these sums are various stamp duties and other charges, to be paid in advance.

Prolongations are not usually granted beyond the term fixed by Government for the duration of the patent.

A slight examination of the invention is made before granting the patent.

Patents are not published, and information respecting them cannot be obtained without the intervention of the Ministry of the Interior, to whom a demand, with the special motives for the same, must be presented.

The working of the invention must be proceeded with during the first year of the patent, and continued without

interruption during the whole term.

The patent does not prevent the introduction of similar products into the country, provided they have been manufactured abroad.

Assignments of patents are not authorized; they may, however, be accomplished by the joint demand of the proprietor and of the assignee, for a new patent in the name of the latter.

The petition to the King should indicate the object of the invention.

The agent or attorney must be furnished with a power of attorney.

The patent becomes void, if the invention is not new, or if it has not been worked within the given time.

FRANCE.

As the country nearest our own shores, and with which our intercourse is so close, it is desirable all inventors should be well informed on the subject of the French laws.

It is highly important inventors should bear in mind that French patents must be applied for prior to the filing the complete specification in England. (See *Lister's Patent*, Newton's London Journal, 1st August, 1859.)

Letters patent for inventions (brevets d'invention) are principally regulated in France by a law bearing date the 5th July, 1844, the material parts of which are as follow:—

Every new discovery or invention in any branch of industry, confers upon its author, under the conditions and for the time hereafter mentioned, the exclusive right of working the same for his own benefit. Such right is constituted by the documents issued by Government denominated brevets d'invention.

The following cannot be patented: (1) Pharmaceutical compounds, or medicines of any kind, these being governed by special laws and regulations, principally by a decree of the 18th August, 1810; (2) schemes and projects of credit and finance.

The duration of patents is fifteen years; the payment in respect of a patent for fifteen years, is 1,500 francs. This sum is to be paid by yearly instalments of 100 francs, and the patent will expire if default is made in payment of any one instalment. The duties may all be paid up in advance when desired.

Foreigners may obtain patents in France; and persons who have patented their inventions abroad may obtain patents for them in France. In such a case, the French patent will expire when the foreign patent expires.

Persons desirous of obtaining a patent apply by petition to the Minister of Agriculture and Commerce, and give a description of the discovery, invention, or application forming the subject of the proposed patent, accompanied, when needful, by drawings.

The petition must be in the French language, and restricted to a single principal object, with the necessary details and its proposed applications. It must mention the duration which the applicant desires for the patent. It must also give a title, comprehending a summary and precise designation of the subject of the invention.

No documents will be received except on production of a receipt proving payment of a sum of 100 francs (£4), on account of the tax on the patent.

The patents which have been applied for in due form, are delivered out without previous examination, at the risk and peril of the applicants, and without Government guarantee, either as to the reality, the novelty, or the merit of the invention, or as to the fidelity or accuracy of the description.

The patentee, or the person entitled to the patent, has the right, during the currency of the patent, to make alterations, additions, or improvements in the invention, and the proceedings are similar to those required to be taken in applying for an original patent. The petition is subjected to a tax of 20 francs only. The certificates of addition obtained by any one person entitled under the patent accrue to the benefit of all.

A patentee who, in respect of an alteration, addition, or improvement, desires to take out a principal patent in place of a certificate of addition expiring with the original patent, must pay the tax levied on original patents.

Only the patentee, and those claiming under him, can, during a year, obtain a valid patent for an alteration, improvement, or addition to the invention forming the subject of the original patent; nevertheless, every person wishing to obtain a patent for an alteration, improvement, or addition to a discovery already patented, may, in the course of the said year, make a formal application to the Minister of Agriculture and Commerce, which is to be transmitted to him, and remains deposited under seal. At the expiration of the year, the seal is broken and the patent issued; but the original patentee always has the preference in respect of alterations, improvements, and additions, for which he himself shall, during the year, have demanded a certificate of addition or a patent.

A patentee may assign the whole or a part of his property under a patent. The entire or partial assignment of a patent, whether as a gift or for valuable consideration, can only be made by a notarial act, and after payment of all the instalments of the tax. No assignment is valid with respect to third parties until after registration.

The descriptions, drawings, specimens, and models of patents issued, remain deposited, until the expiration of the patents, with the Minister of Agriculture and Commerce, where they may be inspected by any one, free of charge. After their expiration patents can be inspected gratuitously at the Conservatory of Arts and Commerce.

Patents are null and of no effect in the following cases, viz. (1) if the discovery, invention, or application is not new; (2) if the discovery, invention, or application is not patentable; (3) if they refer to principles, methods, systems, discoveries, and theoretical or purely scientific conceptions, the industrial applications of which are not shown; (4) if the discovery, invention, or application is contrary to the order, safety, morals, or laws of France; (5) if the title under which the patent has been applied for, fraudulently indicates something which is not the true subjectmatter of the invention; (6) if the description annexed to the patent is insufficient for carrying the invention into

effect, or if it does not completely and fairly state the real methods adopted by the inventor.

No discovery is held new, which, previous to the date of the deposit of the petition, has received publicity in France, or in a foreign country, sufficient to enable any one to execute it.

A patentee will be deprived of his rights under the following circumstances: (1) If he should fail to pay the annual payment before the commencement of each year of the term of the patent; (2) if he shall not put his invention or discovery into execution within two years from the date of the signature of the patent, or if he shall cease for the space of two consecutive years to work the patent—unless, in either case, he can justify his inaction; (3) if he introduces into France objects made in a foreign country similar to those protected by his own patent. This does not apply to models introduced by the patentee with the permission of the Government.

Whoever, in his trade inscriptions, advertisements, prospectuses, marks, or stamps, shall assume the title of patentee, without possessing a patent issued according to law, or after the expiration of a patent; or who, being a patentee, shall describe himself as patentee, or refer to his patent, without adding thereto the words—"sans garantie du gouvernement" (without the gnarantee of the Government), is liable to a penalty of from 50 to 1,000 francs. In case of a repetition of the offence, the penalty may be doubled.

The patent covers all the French colonies.

GERMANY.

The law of the empire of Germany with respect to patents is regulated by an Act which was passed May 25, 1877, and came into operation July 1, 1877. By this law patents are granted for new inventions which admit of industrial use, with the exception of—(1) Inventions the use of which would be incompatible with the laws or the public morals; (2) Inventions relating to articles of food (for nourishment or luxuries), of medicines and of sub-

stances produced by chemical process, so far as the invention does not relate to the method of producing such articles.

An invention is not regarded as new, if it has already been described in a printed publication in any country, or publicly used in Germany at the time of application for a patent.

The first applicant for a patent of invention is entitled to the grant.

The claim of the petitioner to the grant of a patent is void, if the essential contents of his application have without permission been taken from the descriptions, drawings, models, implements, or arrangements of another person, or from a method of manufacture used by the same, and if such person raises opposition on that account.

The patent has no effect against a person who, at the time the patentee made his application, had already been using the invention in Germany, or who had made the necessary preparations for using the same; neither has it any effect in so far as the invention is intended to be used for the army or navy or in the interest of public welfare. In such a case the patentee is however entitled to an adequate compensation by the Empire or the State in whose special interest a limitation of the effect of the patent has been applied for. The amount of such compensation shall be fixed by a court of law in case an agreement cannot be arrived at. The patent does not affect means of conveyance coming temporarily within the empire.

Patents are granted for fifteen years, commencing with the day following the day of application. If an invention is an improvement upon an earlier invention patented by the applicant, he may apply for a supplementary patent, which expires with the original patent.

A fee of 30 marks is to be paid on the issue of the patent, and a further fee must be paid for each patent at the commencement of the second and every subsequent year, amounting in the first instance to 50 marks and increasing by 50 marks per annum for the time of duration of the patent.

The patent expires if the patentee resigns the same, or if he fails to pay the fees within three months at the latest after they have become due. Patents are to be annulled if it is found that the invention was not patentable according to the law, or if the essential contents of the application have, without permission, been taken from the descriptions, drawings, models, implements, or arrangements of another person, or from a method of manufacture used by another.

The patent can be revoked after the expiration of three years if the patentee fails to carry out his invention in Germany to a suitable extent, or at least to do everything that is necessary to ensure its being carried out, or if the grant of licence to others for using the invention appears to be in the interest of public welfare, but the patentee refuses to grant such licence upon an adequate compensation.

Persons not residing in the empire can only claim grants of patents in case of the appointment of a representative resident in Germany.

The granting, annulment, and revocation of patents is vested in the Patent Office, which has its seat at Berlin.

The decisions of the Patent Office are subject to appeal.

At the request of the law courts the Patent Office is bound to give opinion in all questions concerning patents.

A register is kept at the Patent Office, in which the subject-matter and the duration of granted patents will be entered, as well as the name and address of the patentees and of the representatives appointed by them on presentation of their applications. The commencement, the termination, the expiration, the decree of annulment and the revocation of patents must be entered in this register, and simultaneously published in the "Reichsanzeiger."

The essential parts of specifications and drawings, so far as their inspection is permitted to the public, will be published by the Patent Office in an official paper.

The application for the grant of a patent for an invention must be made in writing to the Patent Office. For each invention a separate application is required. The application must contain the petition for the grant of a patent, and must point out in a precise manner the subjectmatter which is to be patented. It must also be accompanied by drawings or other representations, models, and samples, where necessary.

- A fee of 20 marks must be paid on filing the application.

When the invention is approved by the Patent Office, the subject-matter of the application will be provisionally protected in favour of the petitioner, and a notification of the same will be officially published.

If the Patent Office is of opinion that the invention cannot be considered as patentable, the application will be rejected.

After expiration of eight weeks from the day of publication, the Patent Office has to decide as to granting the patent. Until that date objections against the granting can be lodged with the Patent Office. They must be made in writing and be accompanied by arguments.

Before finally deciding, the Patent Office may summon both parties to attend and be heard; it may also cause the objections to be examined by suitable persons skilled in some branch of technical science, and otherwise institute inquiries for elucidating the matter.

Against a decision by which an application is rejected, the petitioner may appeal within four weeks after its notification, and against the decision concerning the granting of the patent, the petitioner or the opponent may appeal within the same time. On filing the appeal 20 marks must be paid for the cost of the proceeding.

As soon as the granting of a patent has been decided upon, the Patent Office will cause a notice to that effect to be published, and then issue the patent.

If a patent is refused, this will also be publicly notified. Upon the refusal, the provisional protection shall be considered as not having taken effect.

No action will be taken upon applications which are not written in the German language.

The term within which an action may be brought for an infringement of patent right, is limited to three years with regard to any single case by which such action may be supported.

The question whether damage has been caused, and to what amount will be decided by the Court after due consideration of all circumstances.

Sentence will be passed for payment of a fine not exceeding 150 marks or imprisonment:—

1. On any person placing on articles, or their packing any designation calculated to cause the erroneous impres-

sion that such articles are protected by a patent in accordance with this law.

2. On any person who in public advertisements, on signboards, on business cards, or in similar notifications, employs a designation calculated to cause the erroneous impression that the articles thus mentioned are protected by a patent in accordance with this law.

GUATEMALA.

A law to regulate the grant of patents for inventions in this Republic was passed the 2nd of June, 1864.

The inventor of an art, manufacture, machine, instrument, preparation of material or any improvement in them, may attend at the Ministry of the Interior and make a clear description of the invention, accompanying it with drawings, models, &c., and swearing that it is his own new invention, and the Minister of the Interior will appoint experts to examine same, and on its originality being established a patent will be issued for a term not exceeding ten years. The Government fee payable is 50 dollars. The specification and drawings will be kept secret during the existence of the patent.

Exclusive privileges may also be obtained on similar terms for the introduction of arts, industries, or machines unknown in Guatemala, but their duration cannot exceed eight years.

The patents contain a stipulation that the privilege is to be worked within a given time (which cannot exceed two years, but is added to the period of the grant), in default of which, or if the working when commenced is suspended for more than a year the patent becomes void.

An infringer, as also a person who obtains a patent surreptitiously, is liable to be punished by fine or imprisonment.

HOLLAND.

There are at present no laws for the protection of inventions in Holland. It is, however, believed that Patent laws will be shortly re-enacted.

ITALY.

The law which governs the grant of Patents for the Kingdom of Italy is dated from 31st January, 1864, confirming the earlier Sardinian law of 30th October, 1859.

The inventor only, whether a native or a foreigner, can obtain a patent of invention.

Inventions are considered patentable which have for their immediate object: (1) An industrial product or result; (2) any instrument, machine, &c., or mechanical arrangement; (3) any process or method of industrial production; (4) a motor, or the industrial application of a force already known; (5) lastly, the technical application of a scientific principle in such a condition that it will produce direct industrial results.

The invention must be novel.

A new invention or industrial discovery patented abroad and not yet imported into Italy, although already published by means of such foreign patent, confers the right to the inventor of obtaining a patent in Italy, provided the application be made before the expiration of the foreign patent.

A patent of invention takes effect from the date of the application, and is in force from the last day of that one of the months of March, June, September, or December which follows next after the date of the application.

Certificates of addition are granted annexed to the principal patent. Application for certificates of addition made during the first six months by the owner of a patent have precedence over applications made for the same invention by others.

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Certificates of reduction, or disclaimers, may be demanded by a patentee within the first six months of his patent, for the purpose of reducing the patent to one or more parts of the invention forming the object of the description annexed to the original demand; it being necessary to point out clearly the parts to be struck out of the patent.

Patents are granted for various terms from one to fifteen years, at the desire of the petitioner. A patent granted for an invention already patented in another country expires with that patent for which the longest term has been granted, but in no case exceeds the maximum limit of fifteen years.

Certificates of addition expire with the original patent to which they are attached.

Every patent is liable to two taxes: the one consisting of as many times 10 francs as there are years in the term demanded; the other (annual) consisting of 40 francs for each of the first three years of the patent, 65 francs for each of the three following years, 90 francs for the seventh, eighth, and ninth years, 115 francs for the tenth, eleventh, and twelfth years, 140 francs for each of the three last years.

A sum of 20 francs only is required for certificate of addition, to be paid in advance.

All certificates of prolongation necessitate over and above the taxes the payment of a sum of 40 francs.

Each certificate of reduction involves the payment of a tax of 40 francs.

The amount of the proportional tax for the term demanded and the first annuity is to be paid when making the application for the patent. This obligation to pay in advance the total of the proportional tax becomes burdensome if the patent should not be continued. On the other hand, each demand for prolongation necessitates the payment of a fixed tax; and the patents demanded for more than five years have accorded to them a period of two years within which they are to be put into operation. Hence the usual practice is to demand a patent for six years. The other annuities are paid in advance the first day of each year of the term of the patent, and are subject to triennial augmentation even in the case of prolongation of the patent. Three months' grace is allowed for the pay-

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ment of the annuities, and if this period lapses the patent is forfeited.

Patents demanded for a less term than fifteen years can be prolonged to this term. Each demand for prolongation must be accompanied by a statement showing the ownership of the patent, and the receipt for the tax of 40 francs.

Demands for patents are subjected to no other examination than that in reference to the rules laid down by the authorities, with the exception, however, of patents for drinks and eatables, which are examined by the superior sanitary council.

The records containing the certificates of deposit, changes, additions, cancelling, or assignment of patents are published. Persons requiring extracts from such records must make the application on stamped paper; the extracts are supplied at the expense of the applicant.

The drawings and descriptions are published three months after the grant of the patent; any one can then obtain one or more copies at his own expense.

Every three months a list of the patents granted during the preceding three months is published in the official journal. Every six months the descriptions and drawings of the patents granted during the previous six months are published.

Patents granted for a term not exceeding five years must be put in operation within the first year of the term, and the working must be continued without interruption for more than one year.

Patents granted for more than five years have a period of two years allowed for working them; in both cases the owner of the patent should, in case of inaction, show the reason of neglect; but the want of funds is not recognized as a valid excuse.

Every deed of transfer or assignment of a patent is registered upon the grant of the original patent, and published in the official journal; such publication is not valid as regards a third party, excepting from the date of registration.

The application for a patent addressed to the Minister of Finance must contain: (1) The name and surname, place of birth and residence of the applicant, and of his attorney or agent; (2) a short and precise description, in the

form of a title, of the nature and object of the discovery;
(3) the length of the term for which the patent is desired.

To the application should be annexed:—(1) Three copies of a description of the invention in French or Italian; (2) explanatory drawings or models (also three copies); (3) a receipt proving the payment of the tax; (4) a list of the documents.

An Italian patent becomes void:—(1) If it has reference to any of the inventions proscribed by the law; (2) if the title fraudulently sets forth another object than the true object of the invention or discovery; (3) if the description does not fully and faithfully point out the necessary means of carrying out the invention; (4) if the invention is not new or useful; (5) if the patent has formed the subject of a certificate granted to a third party for modification of an invention within the six months reserved to the author or his proxy; (6) if the tax be not paid within the three months from the date at which it is due; (7) if the patent has not been worked within the prescribed period; (8) if the patent has been granted to any other than the inventor or his agent.

JAPAN.

A law of patents was some years ago established in Japan, but it has not been acted upon, and no machinery exists for the grant of patents in Japan.

MEXICO.

The law which governs the grant of patents is dated the 7th May, 1832.

Natives or foreigners can obtain patents.

Patents for invention are granted for ten years, for improvements for six years.

If the invention or improvement is of such a nature as to admit of its being kept secret, and if a patent has been obtained for the same, the invention or improvement must be thrown open to the public at the expiration of the term.

Inventions or improvements cannot be worked as patent inventions before the patent which establishes the rights of the patentees is delivered.

Contests about the property of inventions or improvements are settled according to the common laws.

Whenever patents are proved to have been obtained fraudulently, by applicants representing mere importations as inventions or improvements, the patentee forfeits his right to the same.

If inventions or improvements are desired to remain secret, the drawings, descriptions, &c., are not to be published before the expiration of the term.

The patent fees vary between 10 and 300 dollars (pesos). Half the number of men, at least, employed by the patentee in mechanical works, must be subjects of Mexico, if such may be had.

NICARAGUA.

The resolutions of the Spanish Cortes have by decree been declared in force in this Republic. By virtue thereof, any person who shall invent, import, or introduce an invention, may, by application to the prefect of the department or the municipality, obtain a certificate granting him an exclusive right to such invention. The duration of the privilege is to an inventor ten years, to an improver seven years, and to an introducer five years. These terms may be extended by the sovereign power. The invention must be worked within two years or the privilege will cease.

In practice, however, the rules of the decrees are not closely followed, but an arbitrary power is vested in Congress, which grants a patent or withholds it as it sees fit.

NORWAY.

Patents for inventions are granted under laws of 15th July, 1839, and 9th May, 1842, for a period not exceeding ten years, and on condition of the party concerned, before obtaining the patent, giving in a satisfactory account of when the invention was made and in what it consists, so that others after the end of the patent may completely put the invention into practical use. If the invention has been made simultaneously by more persons than one, and they all desire exclusive right, then they may expect to obtain a patent on conditions as above—in such a manner, however, that any one of them can renounce this exclusive right to the same effect as if renounced by all.

The receiver of a patent must, if he makes use of it in a market town, become a citizen and otherwise invest himself with the same rights and same duties as masters in trades.

The description furnished by the inventor must be accompanied by drawings in duplicate where the nature of the invention requires them.

Patents become void unless the patentee puts his invention into practical use in this country within a period of two years.

A fee to the State treasury of 10 specie dollars shall be paid for every patent.

PORTUGAL.

A royal decree, dated the 31st December, 1852, regulates the law of patents in Portugal. Its principal provisions are to the following effect:—

Authors of new inventions, whether national or foreign, are entitled to secure an exclusive right in them by patent; but the patent will be no guarantee of the reality, priority, or merit of the invention. An invention, though in use in foreign countries, is, if new, patentable in Portugal, for from one to fifteen years.

The duration of a patent privilege cannot exceed fifteen years; it is at the option of a patentee to obtain it for a less period from one year. To inventors who have already obtained a patent in a foreign country, no longer time will be granted than is sufficient to make up fifteen years from the date of the foreign patent. The importer of an invention (not being the inventor himself) can only obtain a patent for five years.

Prolongations are granted when demanded within the time of the first demand.

On applying for a patent, an inventor must deliver to the proper office an exact description under seal of the principles, means, and processes which constitute the invention, with the necessary plans in duplicate, sections, drawings, and models.

A patent will not be allowed to comprise more than one subject-matter.

Patentees are required to work their patents officially within two years from the date of the concession.

An annual tax of 5,000 reis (about 28s.) is imposed on a patent, and default in payment of this tax renders the patent void.

Patent rights pass by assignment or by will.

A patent becomes void if the invention be not carried into effect within two years, or if the manufacture be adjudged a nuisance by a competent tribunal.

RUSSIA.

The law as to privileges for inventions in Russia was declared by an imperial decree of the 17th of June, 1812. On the 22nd of November, 1833, the terms of this decree were altered, and amendments were made:—the 23rd of October, 1840, the 15th of August, 1845, the 7th of July, 1852, the 22nd of May, 1862, the 16th of February, 1867, the 22nd of April, 1868, and the 30th of March, 1870.

The privilege granted for inventions or improvements in arts and manufactures is founded upon the letters patent and a certificate (obtained on presenting a petition to Government, accompanied by a full description of the invention with the drawings belonging to it, and in paying the Government tax), which certificate states that the invention therein mentioned was presented at such a date and hour to the Government, and that the Government tax has been paid. The term of the patent begins from the day of issue of the letters patent, but infringers are liable to be prosecuted from the date of the certificate of application.

Patent applications are subject to an investigation into the novelty, and partly into the merits of the invention.

No patents are granted for munitions of war (as, for instance, guns, projectiles, torpedoes, &c.) unless adapted to other purposes (as, for instance, hand fire-arms, metallic cartridges, &c.), when the grant will be made subject to the rights of the Government to use the same without compensation.

Russian letters patent cover also Poland.

The Government does not guarantee that the invention belongs to the person who makes the application; it only certifies that for the same invention no privilege has been granted to anybody in Russia before.

The privilege granted by the Government does not prevent the true inventor from proving, in legal form, that the invention does not belong to the person who obtained the patent of invention.

Until the ownership of the invention is contested, the person to whom the privilege was granted has a right—

- 1. To the absolute property in the invention for the specified time.
- 2. To use the invention himself, and to sell its results to the public, or to transfer the privilege to another person.
- 3. To prosecute persons infringing the privilege in the courts of law, and to recover an indemnity for the loss sustained by the infringement.
- 4. To treat as an infringement the making of articles in a similar manner, even with improvements in them, as long as the essential parts of the first discovery are copied.

The applicant for a patent privilege must deliver to the Government an exact description of his invention, with all essential details, and declare the mode of carrying it into effect; and also furnish the necessary plans and drawings, not keeping back anything requisite to be known to enable the invention to be carried out. The inventor must state what he claims as novel. If the invention relates to hand fire-arms, or surgical instruments, or artificial building materials, a model must also be furnished.

Inventions made in foreign countries may be patented in Russia when no detailed description has been published in Russia, and when the inventions have not been already introduced into the Russian empire.

A patent for an imported invention has the same validity as one granted for an invention made in Russia, until it is shown that the invention had been brought into use before the grant, or that it had been described in published books or papers in such a way that it could have been carried into effect without the patentee's description.

Patent privileges for original inventions, whether made in Russia or in a foreign country, patented or not patented abroad, are granted to the Russian or foreign inventor, or his assignee for three, five, or ten years (the extreme limit) at the option of the applicant. Patent privileges applied for by the mere importer for inventions still remaining under patent protection abroad are granted for one, two, three, four, five, or six years (the extreme limit), at the option of the applicant, but cannot endure beyond the expiration of the patent taken out abroad by the inventor himself. The Government charges amount on patents of invention for three years to 90 roubles (£15); for five years, to 150 roubles (£25); and for ten years to 450 roubles (£75); whilst for patents of importation the Government charges 60 roubles for each year of the duration of the patent. If the application be refused the Government tax is refunded with the exception of from 8 to 15 roubles for the advertisements of the application in the newspapers.

A patent will be void when it is shown to the proper tribunal that the invention has been already practised in Russia, or that, at the time of the presentation of a petition for a patent, it had been previously described in books or periodicals published in Russia or elsewhere, so that it might have been carried into effect without further description. It will also be void where it is impossible to arrive at the promised result by following the directions of the patentee, or if the certificate of working will not be filed within the time prescribed.

No power of attorney is required for the person applying for the patent in case of the absence of the inventor or mere importer.

No prolongation of the term originally granted can be obtained. For improvements in a patented invention a new patent must be applied for. An invention for which a patent has been obtained must be carried into effect within one quarter of the space of time for which the patent was granted, and within six months after this a certificate of working from some local authority must be filed at the Ministry which issued the patent. To prove the working the patented article may be imported.

FINLAND.

Russian letters patent do not cover the Grand Duchy of Finland. Patents have been granted in Finland since the year 1842; a patent law was passed the 30th of March, and came into operation on the 1st of June, 1876.

Patents are granted for inventions or improvements in arts and manufactures. Medicines and inventions, contrary to morals or public safety are not patentable. Patents are granted only to the true inventor, whether native or foreigner.

The Government does not guarantee the novelty or the merits of the invention. As long as the ownership of the invention is not contested, the person to whom the privilege is granted has a right:—

- 1. To the absolute property in the invention for the time specified in the letters patent.
- 2. To use the invention himself, and to sell its results to the public, or to transfer the patent to another person.
 - 3. To prosecute persons infringing the patent in the

courts of law, and to recover an indemnity for the loss sustained by the infringement.

4. To treat as an infringement the making of articles in a similar manner with unessential differences.

The person applying for a patent must deliver to the Government an exact description of his invention, with all essential details, and the mode of carrying it into effect, and also the necessary plans and drawings, and models, if deemed necessary, not keeping back anything requisite to be known. The inventor has also to state in what respects his invention is new, or whether it is an improvement of an invention already used; the novelty of the invention or improvement must be specified in the claims.

Inventions made in foreign countries may be patented in Finland, when no detailed description has been published, and when they have not been already introduced into the Grand Duchy. Where an inventor has a patent for his invention in a foreign country, and has been compelled to publish a specification showing the mode of carrying his invention into effect, such publication does not prejudice the granting of a patent in Finland.

If the invention has been previously patented abroad, an authenticated statement must be given when the patent was issued, and for what term. In such a case the duration of the Finnish patent cannot extend beyond the expiration of the patent taken out abroad by the inventor.

Patent applications are subject to an investigation into the novelty and merits of the invention.

Patents are granted for the terms of from three to twelve years (the extreme limit). The duration of the patent is fixed by the Government in accordance with the state of that part of Finnish industry to which the invention appertains, or with which it is most nearly connected. The Government tax is 20 Finnish marks (1 Finnish mark = 1 franc) for each year of the duration of the patent, but there are extra charges of the Finnish Senate to be paid, for registering the application, the issue of the certificate of application, stamps, poor rates, the sealing, &c., amounting to some hundred marks.

The patentee is bound, within two months from the date

of issue of the letters patent, to publish the specification of his patented invention in two Finnish newspapers, in the Swedish and Finnish languages.

The time prescribed within which the patented invention must be worked is generally two years, but this time may be reduced to one year, or extended, by application, to a period not exceeding four years. After this proof of the working must be given every year.

The patent will be annulled if the patentee has not published the specification of his patented invention, or proved the working of it within the time prescribed; if it should be proved by verdict of a jury that the same invention or improvement for which a patent has been granted was already in use in Finland or elsewhere, or patented by another person, before the application was made; or if it should turn out that the patent is contrary to morals or public safety.

In case of the absence of the inventor, the person applying for the patent must be duly authorized by power of attorney.

No prolongation of the term originally granted can be obtained. For improvements in a patented invention a new patent must be applied for.

SAN SALVADOR.

The Constitution gives power to the Executive to grant privileges to the authors of useful inventions, but no special law exists for regulating the grant of such privileges. It is customary, however, for the Executive in the exercise of its prerogative to follow the practice of civilized governments.

SPAIN,

INCLUDING THE SPANISH COLONIES OF CUBA, PORTO BICO, AND THE PHILIPPINE ISLANDS.

A greatly improved law with respect to patents for inventions came into operation on 1st August, 1878.

Under this new law many facilities are afforded for the introduction into Spain of numerous inventions which the restrictions and cost of obtaining patents under the old law precluded. A most valuable feature of the new law is, that one patent includes not only Spain but the Colonies of Cuba, Porto Rico, and the Philippine Islands, for each of which a separate and most costly patent has hitherto been requisite.

The rights of foreigners are the same as those of natives, as regards obtainment of patents.

Two classes of patents are granted, one to inventors, and another to those who, without being inventors, introduce or import a new industry into Spain or the Colonies.

Patents for invention are granted for twenty years, those for introduction for five years.

The proprietorship of a patent is hereditary, and can be sold or negotiated, just as any other property, according to the existing laws in Spain.

Patents are granted to one or more individuals, or to a society or company.

Patents of invention are granted to all who solicit them, without previous examination as to the novelty or usefulness of the invention.

Foreigners must apply for patents in Spain before their inventions are published and made known elsewhere, so that the *invention* may be considered as new in Spain; in such case, the patent will be granted for twenty years. But if a foreigner allows two years to pass from the time in which his patent was published, or made known in another country, before soliciting the same patent in Spain, he then incurs the risk of any one proving before the Spanish courts that his invention was published when he applied for the patent in Spain, in which case the patent will be granted for ten years only.

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The annual taxes are 10 pesetas (10 francs) for the first year; 20 pesetas (20 francs) the second year; 30 pesetas (30 francs) the third year, and so on successively, each year 10 pesetas (10 francs) more than the previous year.

The following documents are needed on application for a patent:—

1st. A power of attorney in Spanish, or translated into Spanish, officially, at the Spanish Legation or Consulate, and duly legalized, indicating the name and residence of the person in whose name the patent is to be granted.

2nd. A complete specification, explaining the invention and the points claimed. The patent will be granted on the point or points specified in the claims. The references to weights or measures in the specifications and the scale of drawings, must be made in accordance with the French Metrical System.

3rd. The drawings must be on tracing cloth, in black ink, without colours or colouring, on the French Metrical Scale, and in duplicate.

If on examining the documents and papers in the Art Conservatorio, it should be found that they are incomplete, or not presented according to this law, two months will be allowed to the applicant to correct the error if the inventor resides in Europe; four months if he resides in America; and eight months if he resides in Asia. No secrecy will be observed, as formerly, with regard to the patents granted. The specifications and drawings will be open to the public in the Art Conservatorio.

Certificates of Addition are granted. During the whole term of a patent, the owner, his heirs, or the person representing his rights, can obtain protection for improvements on or additions to his original patent. The Certificates of Addition will be granted and considered as parts of the original patents. They are solicited in the same manner as the patents, and terminate when it terminates. Instead of soliciting a Certificate of Addition, a new patent, independent of the principal one, can be obtained for improvements.

The sale, cession, or negotiation of patents, can be made before a notary in any country. If the cession is made in Spain, a special power must be sent for it. If the cession is made before a foreign notary, out of Spain, the document or contract must be made directly in Spanish, or must be officially translated in the Spanish Legation or Consulate.

All documents sent to the patent office department must be legalized in the Spanish Legations or Consulates of the places from whence they come. In the contracts of sale or cession, a certificate from the Art Conservatorio of Spain must be annexed to prove that the annual taxes on the patent are paid up to the date of the contract. The sale or cession of the patents, with all the requisite formalities, must be registered in the Ministry of Fomento at Madrid.

Two years are allowed for the official working of the patent in Spain, but this term can be prorogued by a special law passed in the Cortes to that effect.

Patents will be declared void when their owner ceases to pay the annual charges, or when he has not proved officially that he has worked the patent within the two years.

Patents may be annulled at the instance of a third person and by the sentence of a Spanish court in case it is proved the invention was not new when applied for, or because the specification does not sufficiently describe the manner in which the invention is to be worked.

The infringement of a patent is punishable with a fine. All articles wrongfully manufactured under the patent infringed are to be delivered to the rightful owner of the patent, and the patentee has a right, besides, to claim damages. If the infringer is not able to pay the fine, he will be imprisoned for a proportionate length of time.

Counterfeiters of patents will be also punished according to the Spanish Criminal Code.

Governors of the Spanish Colonies can no longer grant patents. All patents must be applied for in the Ministry of Fomento, at Madrid, and will be granted for Spain and all her colonies in one patent.

SWEDEN.

By a royal ordinance, bearing date the 19th August, 1856, the following regulations concerning patents are made:—

Patents are granted—1st, For new inventions, whether they consist in machinery or in some art; 2nd, for improvements on old inventions. They are not granted for medicines, nor for bare principles.

Patents are not granted for a shorter term than three years, nor for a longer term than fifteen years, and the length of time will depend upon the value and importance of the invention. The inventor only can obtain a patent.

If any one has obtained a patent in a foreign country, he can obtain one in this kingdom; but the time must never extend beyond the duration of the patent in the foreign country.

A full description of the invention, accompanied when necessary by drawings and models, must be lodged along with the petition at the Chamber of Commerce.

The patentee is required to furnish, before the expiration of two years, to the Chamber of Commerce, proof that he is in full exercise of the patent—which period may be reduced to one year, or may be, in consequence of a petition to that effect, extended to four years, this being regulated by the value and importance of the patent in question; and also to furnish annually, during the entire period in which the patent right remains in force, proofs that he continues to exercise the invention.

Patents may be assigned when certain formalities have been complied with.

If a patent has been granted for an invention of the same nature as one previously patented or exercised by some other person residing in the kingdom; or if the holder of a patent has given in an inexact description of the means employed for the working of such invention so that the real nature of the invention cannot be properly understood; or if the holder has given himself out to be the inventor without being so; or if a patented invention contains anything injurious to the public safety or health, or anything having an immoral tendency, the patent will be declared void.

SWITZERLAND.

Patents are not procurable in the Swiss Confederation, excepting in the Canton of Tessin, where the local government has power to grant, on payment of a sum varying from £2 to £20, an exclusive privilege within its territory.

VENEZUELA.

Patents are procurable for a term of not less than six, nor more than fifteen years for new discoveries, inventions, or improvements, and for the importation from abroad of manufacturing processes or industrial improvements. The applicant has to address a petition to the Minister of the Interior accompanied by a declaration stating that he is the true inventor, and by a description of the invention, and a patent will be issued by the President of the Republic. Patents of invention become void if not worked within two years, and imported patents within one year of The term of the exclusive privilege for the selling of the patented articles dates from the commencement of the working of the patent. The factory, plant, &c., of the patentee are subject to an annual government tax not exceeding one per cent. of their cost. Primary materials required for the manufacture are exempt from import duties. Patents may be assigned. Infringers are punishable by fine and imprisonment.

PATENT LAWS OF THE BRITISH COLONIES.

Since the Imperial Government has declined to issue any grants of patents for colonies, most of our colonies have themselves established patent laws, principally framed upon the British law. Many of the colonies now grant a large number of patents, but it is obvious that except in special cases patents are not often required in the smaller colonies. The number of patents granted in Canada, India, and the Australian Colonies is constantly increasing.

THE AUSTRALIAN COLONIES.

NEW SOUTH WALES.

The Act of the Colonial Legislature relating to patents is dated 14th September, 1852.

Every person who, upon claiming to be the author or designer, by his agent or assignee, of any invention, shall be desirous of obtaining a letter of registration, shall deposit with the Colonial Treasurer the sum of £20 sterling, and shall, after such deposit, present a petition to his Excellency the Governor, setting forth that he is the author or designer of such invention, and specifying the particulars of such invention, and that he has deposited with the Colonial Treasurer the sum of £20; whereupon the Governor may grant the letters of registration, and such letters of registration, within three days after the granting thereof, are to be registered in the proper office in the Supreme Court. Every grantee of such letter of registration can assign the same to any person or persons by an instrument in writing under his hand and seal, to be registered in the

Supreme Court in the same manner and within the same period after the execution thereof as the original letters of registration.

The letters of registration may be repealed by scire facias.

NEW ZEALAND.

The Act relating to patents in this colony was passed 12th September, 1870, and is cited as "The Patents Act, 1870."

By it provision is made for the granting of letters patent to an inventor if he has not obtained or applied for letters patent elsewhere, and for the granting of letters of registration to the *bond fide* holder of letters patent elsewhere.

To obtain letters patent the process is substantially similar to that which obtains in the mother-country, except that the application has to be extensively advertised.

To obtain letters of registration, which have the same force and effect as letters patent, a force of £10 has to be paid, and a number of documents have to be provided as set forth in a long series of regulations, in order to prove that the applicant is the bona fide holder of letters patent elsewhere.

Patented inventions must be worked in the colony within two years of the date of the New Zealand grant.

QUEENSLAND.

No substantive patent law has been enacted in the colony of Queensland since its separation from New South Wales, but the Colonial Act (New South Wales), 16 Victoria, No. xxiv., 14th September, 1852, was continued in force in the colony by an Order in Council of the 6th November, 1859, and a patent can be obtained similar in terms to those granted in New South Wales, and at the same cost. A short Act was passed in 1867 by which inventions can be provisionally protected in this colony, but these protections would appear to be useful only to residents in the colony.

SOUTH AUSTRALIA.

The patent law of this colony is now embodied in an Act called "The Patent Act, 1877," which was passed 21st December, 1877.

Every applicant for letters patent must present a petition and declaration, together with specification and drawings in duplicate. The petition must be signed by the applicant, who may be either the inventor or his assignee; but the other documents must be signed by the inventor, if he be alive, the declaration being made before any competent authority, and the specifications and drawings attested by two witnesses. The place and date of signature must also be stated in every case.

The fees are somewhat low, but the Commissioner of Patents always exercises his power of referring applications to examiners at a cost of at least £5 5s. And further, inasmuch as every application is advertised, and the specifications are open to the public at large before the grant of the patent, an undue amount of encouragement is offered to litigious persons to oppose applications.

Fees of £5 each have to be paid at or before the expiration of the third and seventh years respectively.

TASMANIA.

The law of patents in this colony was established by an Act passed 5th November, 1858.

The proceedings to obtain patents are very similar to those at home, and the provisions with respect to actions, disclaimers, &c., are also much the same.

The Government fees are about £7 10s. on application, and a stamp duty of £15 is to be paid at the expiration of the third year, and £10 at the expiration of the seventh year of the grant.

VICTORIA.

An Act of the Colonial Legislature, entitled "An Act to Consolidate the Law concerning Letters Patent for Inventions," was passed in May, 1865, being Act No. 240

of the session held in the twenty-eighth year of Queen Victoria. The previous Patent Acts were first repealed, and then power was given to the Governor of the colony to issue letters patent, the language of the Act being nearly the same as that of the British statute of James I.

All applications for letters patent for an invention are to be made as follows:—The applicant must deposit a specification, accompanied by drawings when necessary, at the office of the Registrar General. Provisional protection for six months is thereby obtained. The form of the specification, and the size of parchment, are set forth in the Act. The subsequent proceedings are pretty much the same as those had in obtaining British patents.

The patent will become void unless the sum of £15 is paid before the expiration of the third year, and the sum of £20 before the expiration of the seventh year.

The colonial patent will expire at the same time as the foreign patent, in case any foreign patent should have been previously obtained.

A patentee or his assignee is authorized to file disclaimers or memoranda of alterations.

Patents may be prolonged by taking the proceedings prescribed in the Act; but the patentee or his assignee must make application for this purpose at least six months before the expiration of the original term.

The schedules of the Act contain forms of petitions, notices, letters patent, &c.

WESTERN AUSTRALIA.

The special Colonial Act is dated 15th August, 1872.

The bona fide holders of letters patent in any other country can obtain letters of registration having the force of letters patent, and expiring with the original patents. The government fee is £25 and is paid in one sum.

Original letters patent can also be obtained but are seldom taken out except by residents in the colony. The government fees on these letters patent are £50. These letters patent are only granted when application for a patent is made in the colony before being made anywhere else.

BRITISH GUIANA.

The law relating to patents is governed by an ordinance dated July 12, 1861.

Every inventor desirous of obtaining a patent must petition the Governor for the grant. The form of the documents is very similar to those in use in Great Britain, and the proceedings under the petition are also very similar, there being a reference to the Attorney-General, whose duties in respect to patents nearly resemble those of the same officer at home.

The conditions of the patents granted are nearly, if not precisely, similar to those of the British grants, and there is a duty of 100 dollars payable in the seventh year of the term.

The ordinance also contains provisions as to disclaimers similar to those in operation at home.

BRITISH HONDURAS.

Patents are now granted for this colony, under the Act for amending the law for granting patents for inventions, dated 10th September, 1862.

The provisions of this Act bear a general resemblance to those in the "Patent Law Amendment Act" of 1852. Commissions of patents for inventions are appointed, who have power to make rules regulating grants. Every applicant must petition the commissioners, and the petition and accompanying specification are referred to the Attorney-General for the colony. The applicant can lodge either a provisional or a complete specification in the first instance. The Attorney-General grants a certificate of allowance, which certificate is filed in the office of the Colonial Secretary, whereupon the invention is protected for six months. This protection is advertised, and the applicant is at liberty to give notice to proceed; and on the expiration of the time allowed for oppositions, letters patent are granted for

fourteen years. These letters patent are void unless certain duties are paid at the expiration of three and seven years from the grant. The letters patent expire on the determination of any earlier patent granted for the invention in Great Britain, or in any foreign country or British colony. This Act also provides for a "Register of Patents" and a "Register of Proprietors" being kept. Patentees may also enter disclaimers or memoranda of alteration. The Commissioners of Patents are authorized to grant prolongations of the original term not exceeding seven years. Actions for infringements must be brought in the Supreme Court of the Colony.

The Government fees on sealing

Letters patent amount to	•	\$ 30
Third year's duty .		\$ 50
Seventh year's duty .	•	\$100

CANADA.

The law of patents for the Dominion of Canada, including the provinces of Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward's Island, Manitoba, and British Columbia, is regulated by the "Patent Act of 1872," which came into operation 1st September, 1872, and the subsequent amendments made in 1873 and 1875.

Patents may be obtained for all inventions not being in public use, or on sale in Canada, for more than one year before the application for the patent. Inventors are not entitled to patents on their inventions if patents therefor have been in existence in any other country more than twelve months prior to the application in Canada. Where a foreign patent exists, the Canadian patent expires at the earliest date at which any foreign patent for the same invention expires. Two or more separate inventions cannot be included in one patent.

An inventor applying for a patent has to make oath that he is the inventor, and must elect a domicile in Canada.

The specification is required to be in a peculiar form, in

duplicate, and must concisely state the claims; it must be illustrated when practicable by drawings, in triplicate, with an additional drawing showing the most important parts; and a working model not exceeding eighteen inches in length is also requisite, or if the invention be for a composition of matter, specimens of the ingredients.

Patents are granted for five, ten, or fifteen years, extensions of patents for five years being granted for an additional term of five or ten years at the end of this first term, or for a further period of five years at the end of the extension; no patent, however, to exceed in duration fifteen years, and all applications to be filed during the pendency of the patent.

A patentee may file a disclaimer of any portion of the specification claiming matter found not to be novel; and an original patent insufficiently covering the invention may be surrendered, and a new patent with amended specification and claims be issued in its stead. It must be shown that the matter of the reissue might have been embraced in the original patent. No new matter can be introduced.

The Government of Canada reserves the right to use patents, paying such compensation for so doing as the Commissioner of Patents reports to be reasonable.

Patents are assignable in whole or in part. Assignments require registration in the Patent Office.

Actions for infringements may be brought in any court of record, having jurisdiction, to the amount of the damages asked for, and having its sittings in the province where the infringement has taken place.

Patents are void if any material allegation in the petition or declaration be untrue, or if the specification contain more or less than is necessary, if such omission or addition is wilfully made for the purpose of misleading; but if the court is satisfied that such omission or addition is an involuntary error, and the patentee is proved to be entitled to the remainder of his patent pro tanto, the patent is to be held valid for such part of the invention.

Patents become null and void at the end of two years from their date unless the patentee shall have commenced, and shall after such commencement continuously carry on, in Canada, the construction of the invention; and shall be void, if after the expiration of twelve months from the date of the patent, the patentee shall import into Canada the invention. In case of any dispute as to whether a patent is or is not void, such dispute is settled by the Minister of Agriculture or his deputy.

A patentee may, on good reason being shown, obtain an extension of the time allowed for putting the patent into operation.

The Government fee payable on a patent

For five ye	ears is.				•	\$20
"ten	,, •	•				\$4 0
" fifteen	,, .		•			\$ 60
Extension from five to ten years						\$ 20
", ", ten ", fifteen "						\$2 0

Inventors not having perfected their inventions may have their inventions protected by caveats.

The commissioner may object to grant patents when he is of opinion the invention is not patentable in law; when the invention is already in the possession of the public; when there is no novelty in the invention; when the invention has been previously described in a printed book, and when the invention has already been patented in Canada or elsewhere more than one year before the Canadian application. In such case the amount of the Government fees filed, less ten dollars, will be returned to the unsuccessful applicant.

Every patentee is compelled to stamp on each patented article sold by him, or on the package enclosing such articles, the year of the date of his patent, and the word "patented," or any abbreviation of the same.

All applications for patents must be proceeded with and perfected within two years after application.

CAPE OF GOOD HOPE.

This Colonial Legislature has adopted a system very similar to that of the mother-country, governed by an Act passed in 1860.

The applicant for a patent must deposit at the office of

the Colonial Secretary a specification of his invention, which is referred to the Attorney-General, who reports upon it, and the Attorney-General issues a warrant for the grant.

A writ of scire facias may be sued out for the repeal of the patent.

The letters patent are void unless a stamp duty of £10 is paid at the expiration of the third year, and of £20 at the expiration of the seventh year of the grant.

Letters patent for foreign inventions expire with the foreign grant.

The regulations as to disclaimers, prolongations, and confirmations, are similar to those of the home patents.

A register of patents and of proprietors is kept.

There is a penalty of £100 for the unauthorized use of the word "patent."

Particulars of breaches and of objections are to be given in patent actions.

CEYLON.

The inventor of any new manufacture may petition the Governor for leave to file a specification thereof; such petition must be in writing, and signed by the petitioner or his agent, and shall state the name, condition, and place of residence of the petitioner, and the nature of the invention, upon which the Governor may order the petitioner to file a specification.

The specification must be filed within six months from the date of the order, upon which the Governor may grant to the inventor the sole and exclusive privilege of making, selling, and using the said invention in Ceylon for the term of fourteen years from the time of filing such specification; and for a further term not exceeding fourteen years, upon petition to be presented by such inventor, not more than one year and not less than six months before the expiration of the exclusive privilege thereby granted.

The specification must be in writing, and signed by the petitioner, and shall particularly describe and define the

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nature of the invention, and the manner in which the same is to be carried out.

No specification can be filed until the petitioner has paid all fees. The fee on filing a specification is £10.

INDIA.

The Act relating to patents for inventions is dated 17th May, 1859.

Exclusive privileges may be obtained for protecting the invention or improvement of any art, or process, or manner of producing, preparing, or making an article, and also the invention or improvement of any article prepared or produced by manufacture. It is required that the invention be useful, and that it be new; and an invention is to be considered new if it have not, at the time the exclusive privilege is applied for, been publicly used in India or in any part of the United Kingdom, or been made publicly known in any part of India or of the United Kingdom by means of any written or printed publication. If, however, the knowledge of an invention has been obtained surreptitiously, or has been communicated to the public in breach of confidence, the public use or knowledge is in that case to be no bar to the acquisition of the exclusive privilege, if the inventor have not acquiesced in it, and if he make his application within six months after the public use has commenced; nor is the use of an invention by an inventor, or his agent, or any person with his licence, for a period not exceeding one year before the exclusive privilege is applied for, to be deemed a public use within the meaning of the Act. The provisions of the Act are available, not merely for actual inventors, but also for the personal representatives and the assignees of actual inventors; and they extend also to foreigners, whether resident abroad or not. The importer of a new invention into India is, however, expressly excluded from the benefits of the Act, unless he be also the actual inventor, or his personal representative or assignee.

The exclusive privilege is acquired by merely filing a

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specification of the invention, upon which, without any further process, the applicant becomes at once entitled to the exclusive right of using and selling the invention in India, and authorizing others to do so, for the term of fourteen years from the date of filing the specification. Leave to file the specification must, however, be previously obtained; and for this purpose, a petition must be presented to the Governor-General in Council, who is empowered to refer it to any person or persons for inquiry, and, in the event of an order authorizing the specification to be filed being granted, to annex any conditions he deems proper to the order. The fees attending the inquiry are paid by the petitioner, and no specification is to be filed until all the fees have been paid. Every specification must be filed within six months after obtaining the Governor-General's order.

The specification must be in writing, signed by the petitioner, and must particularly describe the invention, and how it is to be performed. The petition and specification are each accompanied by a declaration, signed by the petitioner, or by his agent, if he be absent from India, stating that he is in possession of the invention, which he believes will be of public utility, and that to the best of his belief it is not known or used in India, or in any part of the United Kingdom, and that it is truly described in the petition and specification. Persons making false statements in these declarations are to be considered guilty of perjury; and wilful mis-statements in the petition or specification will render the exclusive privilege liable to be declared void. The specifications filed under this Act are registered in a book, kept in the office of the Secretary to the Government Home Department, and is to be open to the public on payment of a small fee.

Any part of an invention may be disclaimed, should it appear at a future time to the petitioner that he ought not to have included it in his petition or specification; and in case of any defect or insufficiency in the latter, leave may be obtained to file an amended specification, which, however, is not to extend the exclusive privilege before acquired. In both these cases, moreover, it must be shown that no fraud has been intended. The term of an exclusive privilege may be extended for a term not exceeding fourteen years

from the expiration of the first fourteen years, upon taking certain proceedings not more than one year, nor less than six months, from the expiration of the original term. All rights which had been acquired under the repealed Act, previously to its repeal, are preserved.

Every exclusive privilege granted is to cease, if the Governor-General in Council shall declare the same, or the mode in which it is exercised, to be mischievous to the State, or prejudicial to the public. Further, if satisfactory proof be afforded to the courts of law that any condition, upon which leave to file a specification was granted, has been broken, power is given to the Governor-General in Council to declare that the exclusive privilege thereby obtained shall cease.

Any inventor who has obtained letters patent for the exclusive use of an invention in the United Kingdom may, by taking proper proceedings within six months from the date of filing his complete specification in England, obtain protection in India for his invention, which is to be deemed new there, if it was not publicly used or known in India before the date of the petition for letters patent; but no such exclusive privilege is to extend beyond the term of the letters patent, unless they are renewed, in which case the exclusive privilege may also be extended for a like term.

If any person, not being the actual inventor, or the representative or assignee of an actual inventor, has fraudulently obtained any exclusive privilege for protecting an invention, he may be compelled, upon proof of the fraud, to assign the exclusive privilege to the actual inventor, or his representative or assignee, and to account to him for the profits.

The Act contains provisions allowing any persons to apply to the courts of law for a declaration that any alleged exclusive privilege has not been acquired, in consequence of non-compliance with the requirements of the Act; and there are also regulations respecting the conduct of proceedings to restrain infringements, &c., but as these relate mainly to the practice of the Indian Courts, it is unnecessary further to refer to them here.

JAMAICA.

The law of patents in this island is governed by an Act passed in the year 1857.

Every inventor desirous of obtaining a patent must petition the Governor; the petition, accompanied by a declaration as to the invention, and a specification fully describing the same, is then referred to the Attorney-General, who gives a certificate of his allowance, upon which the Governor issues letters patent.

The patent must be brought into operation within two

years from its date.

The patentee is at liberty to assign all or any part of his rights, and patents may be issued to assignees of any persons who have obtained patents in other countries.

The Act also makes provision as to disclaimers, and provides that a patentee may add a specification or description of any improvement upon the original invention, and have the same annexed to the original specification.

The Act also contains provisions as to pleadings and costs in actions, as to the writ of scire facias, and as to the appointment of commissioners.

The letters patent bear a stamp duty of £5.

LEEWARD ISLANDS.

The law of patents for this colony is Act No. 12 of 1876.

Patents are granted for a term of fourteen years, and the regulations are very similar to those at home.

The Government fees on the grant, including those of the law officers, amount to £28; and a duty of £10 is payable at the expiration of three years; and £20 at the expiration of seven years. The stamp on a disclaimer is £3.

MAURITIUS.

The Governor is empowered to grant letters patent for a period not exceeding fourteen years; the patentee paying a duty, to be fixed by the Governor, not exceeding £100. The letters patent give to the proprietors the exclusive faculty to employ the processes invented, and to sell the produce thereof, to prosecute infringers, and to obtain damages. A provisional seizure of the infringing articles may be made under certain conditions, and infringers are liable to a fine not exceeding £200.

A description must accompany the application for letters patent. The letters patent may be annulled—for any omission or unfaithful description of the invention, in case of any previous discovery being ascertained; and for non-exercise of the privilege for two years; if the patentee shall, after obtaining a Mauritius patent, afterwards obtain a patent elsewhere; and if the invention should appear to be dangerous.

NATAL.

The law of patents for this colony is governed by the Colonial Act No. 4 of 1870, "To provide for the granting in this Colony of Patents for Inventions," and is based on the provisions of the Patent Law Amendment Act of 1852.

The power of granting letters patent for fourteen years is vested in the Lieutenant-Governor. Applicants are required to deposit in the office of the Attorney-General a description of the invention, or provisional specification; a certificate of such deposit is given to the applicant, whereupon the invention is protected for six months. In lieu of the provisional specification the applicant may, if he thinks fit, deposit a complete specification with the Attorney-General. The applicant may give notice to proceed immediately after the deposit of his specification. This

notice to proceed is advertised in the Government Gazette. After the expiry of the period allowed for oppositions, the Attorney-General grants his warrant, upon which letters patent are sealed. The letters patent are void unless certain duties are paid at the expiration of three and of seven years. The letters patent also expire with the determination of any British or foreign patent of an earlier date. Patentees are at liberty, with leave of the Attorney-General, to enter disclaimers or memoranda of alteration. The Lieutenant-Governor is empowered to grant prolongations of the original term not exceeding fourteen years. The law provides that a "Register of Patents" and a "Register of Proprietors" shall be kept.

All actions for infringements are to be brought in the Supreme Court.

The fees for sealing t	he le	tters p	atent	are	£1 10s.
Third year's duty	•	•			£5
Seventh year's duty					£10

NEWFOUNDLAND.

The law of patents for this colony is now based upon an Act passed 12th May, 1856.

Inventors desirous of obtaining patents in Newfoundland, must present a petition to the Governor for the grant, and must deliver into the office of the Colonial Secretary a specification of the invention, and, in case of a machine, a model also. The patent is granted upon this petition, after a reference to the Attorney-General.

The patent is granted for fourteen years, but may be extended for a further term of seven years.

STRAITS SETTLEMENTS.

The ordinance for granting exclusive privileges to inventors is No. 12 of 1871, dated 15th November, 1871.

Exclusive privileges may be obtained by actual inventors or first importers of inventions not publicly used or known in the colony. An invention shall be deemed new if it shall not, prior to the time of applying for leave to file a specification, have been publicly used by other than the inventor in the United Kingdom or the colony.

Exclusive privileges are obtained by inventors petitioning the Governor in Council for leave to file a specification, whereupon the Governor may make an order authorizing the petitioner to file a specification. If the specification be filed within six months after the date of the Governor's order, the Governor may grant the petitioner an exclusive right to use the invention in the Colony for the term of fourteen years, and for such further term, not exceeding the term of fourteen years, as the Governor may direct upon petition presented to him at any period not more than one year and not less than six months before the expiration of the original term of the exclusive privilege. Errors, defects, or insufficiency in specifications may be corrected by disclaimers or by filing amended specifications.

Inventors having obtained British or British-colonial patents, may obtain exclusive privileges during the remainder of the term for which such British or British-colonial patents may have been granted.

Actions for infringement of the exclusive privileges may be maintained in the Supreme Court of the colony; and the rules regulating such proceedings appear to be greatly in favour of the holders of exclusive privileges. Appeals from the Supreme Court may be made to Her Majesty in Privy Council.

The stamp on a petition for the grant of an exclusive privilege is \$50.

TRINIDAD.

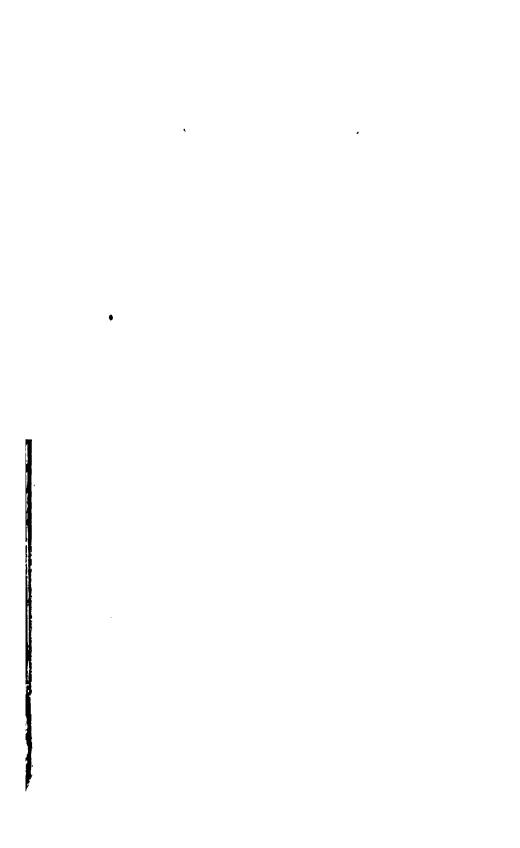
The ordinance for granting exclusive privileges to inventors is No. 25, dated the 2nd September, 1867.

On application to the Registrar-General of the island, and on delivery to him of a declaration, accompanied by a

specification, he will issue a certificate, which must be advertised in the official Gazette. The specification may be delivered open or in a sealed envelope. In the latter case the Registrar-General will, at the end of six calendar months from the date of the certificate, or at an earlier day at the request of the patentee, break the seal of the envelope and register the specification.

The certificate vests in the applicant the exclusive right to the invention within the island for fourteen years; but if at any time during that term it shall be made to appear that the invention is not new as to the public use and exercise thereof in the island, or that the invention is prejudicial or inconvenient to the public, then the applicant's exclusive privileges will become void.

The fees payable to the Registrar-General on leaving the declaration and specification, and for publication of same in Gazette amount to £10 10s.



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